BEFORE THE BIOTECH LOAN TASK FORCE INDEPENDENT CITIZENS' OVERSIGHT COMMITTEE TO THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE ORGANIZED PURSUANT TO THE CALIFORNIA STEM CELL RESEARCH AND CURES ACT

REGULAR MEETING

- LOCATION: 1400 J STREET ROOM 203 SACRAMENTO, CALIFORNIA
- DATE: MARCH 11, 2008 4 P.M.
- REPORTER: BETH C. DRAIN, CSR CSR. NO. 7152
- BRS FILE NO.: 80461

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1	SACRAMENTO, CALIFORNIA; TUESDAY, MARCH 11, 2008
2	4:10 P.M.
3	
4	CHAIRMAN ROTH: GOOD AFTERNOON. MY NAME
5	IS DUANE ROTH, AND I CHAIR THE TASK FORCE ON THE
6	LOAN PROGRAM. AND I WOULD LIKE TO SO WE'RE
7	GOING TO TAKE ROLL CALL. WE DO HAVE SOME PEOPLE ON
8	THE PHONE, SO THEY WILL CHIME IN, SO IF YOU WOULD,
9	MELISSA.
10	MS. KING: FLOYD BLOOM.
11	DR. BLOOM: HERE.
12	MS. KING: MARCY FEIT.
13	MS. FEIT: HERE.
14	MS. KING: MICHAEL GOLDBERG.
15	MR. GOLDBERG: HERE.
16	MS. KING: BOB KLEIN. TED LOVE.
17	DR. LOVE: HERE.
18	MS. KING: ED PENHOET. DUANE ROTH.
19	CHAIRMAN ROTH: HERE.
20	MS. KING: JEFF SHEEHY.
21	MR. SHEEHY: HERE.
22	MS. KING: OS STEWARD.
23	CHAIRMAN ROTH: WE DO HAVE A QUORUM. WE
24	DO, JUST FOR ALL OF YOU TO BE AWARE ON THE TASK
25	FORCE, THE TWO SITES, WE HAVE ONE IN PLEASANTON,
	3

1	CALIFORNIA, AND ONE IN SAN CARLOS. SO WE'LL TRY TO
2	ASK THE TASK FORCE MEMBERS THAT ARE ON THE PHONE TO
3	LET US KNOW IF THEY HAVE COMMENTS TO MAKE. AND
4	THEN WHEN WE GET TO THE PUBLIC SESSION, WE CAN DO
5	THAT AS WELL.
6	SO WITH THAT, LET ME MAKE JUST A COUPLE
7	OF INTRODUCTORY COMMENTS TO KICK THIS OFF AND
8	REVIEW WHERE WE'VE BEEN. THE TASK FORCE WAS
9	CHARGED WITH COMING UP WITH A POLICY FOR GOVERNING
10	LOANS THAT THE CIRM MAY CHOOSE TO MAKE. AND THE
11	FOCUS HAS BEEN SPECIFICALLY
12	(ROBERT KLEIN ARRIVES IN THE HEARING
13	ROOM.)
14	CHAIRMAN ROTH: ON THE PRIMARY TERMS
15	OF THAT LOAN, WHAT THAT LOAN MIGHT LOOK LIKE, AND
16	WHAT THE COVENANTS ARE, IN ADDITION TO HOW THE
17	PROCESS ITSELF WOULD UNFOLD IN REVIEWING APPLICANTS
18	THAT MAY BE APPLYING FOR THESE LOANS IN THE FUTURE.
19	SO WE IN OUR FIRST MEETING SET OUT A WORK
20	PRODUCT THAT WE WANTED TO SEEK INPUT FROM OTHERS
21	THAT HAVE HAD SIMILAR EXPERIENCES, BOTH DISEASE
22	ASSOCIATIONS THAT HAVE MADE LOANS AND OTHER STATE
23	PROGRAMS WHERE LOANS HAVE BEEN MADE. AND WE
24	CONTRACTED WITH PRICEWATERHOUSECOOPERS, WHO WE'RE
25	GOING TO HEAR FROM A LITTLE LATER TODAY, IN FACT,
	4

1	IN OUR NEXT AGENDA ITEM, ON WHAT THEY'VE LEARNED SO
2	FAR. AND THEN IF THE TASK FORCE FEELS THERE'S
3	ADDITIONAL INFORMATION WE WANT, SO DIRECT THAT SO
4	THAT WE GET THE FULL PICTURE OF THE OTHER PROGRAMS
5	THAT ARE OUT THERE. SO WE'LL BE GETTING TO THAT IN
6	THIS MEETING TODAY.
7	IN ADDITION, WE SAID WE WANTED TO MEET
8	WITH STAKEHOLDERS, AND IN PARTICULAR THE FINANCIAL
9	COMMUNITY, TO FIND OUT WHAT KINDS OF OPPORTUNITIES
10	AND CONCERNS THEY MAY HAVE ABOUT LOANS THAT WE MAKE
11	WHEN THEY'RE FOLLOW-ON FINANCERS OF THOSE LOANS. I
12	THINK IF YOU READ THE TRANSCRIPT, THERE'S
13	CONSIDERABLE INFORMATION THAT WE GAINED AT THAT
14	MEETING.
15	AND THEN WE HAD A SECOND MEETING WHICH
16	REALLY FOCUSED ON THE INDUSTRY SIDE, AND WE ASKED
17	MEMBERS REPRESENTING LARGE COMPANIES IN THE STEM
18	CELL AREA OR RELATIVELY, I SHOULD SAY, LARGE
19	COMPANIES TO THE VERY SMALL START-UPS TO TALK WITH
20	US ABOUT THEIR, A, INTEREST IN THIS PROGRAM AND, B,
21	WHAT KINDS OF CONCERNS OR OPPORTUNITIES THEY SAW
22	THAT WE SHOULD TRY TO ADDRESS.
23	NOW, WE'VE BEEN USING A WORKING DOCUMENT
24	TO ELICIT RESPONSE TO, AND THAT PROVED TO BE VERY
25	HELPFUL AS WE WALK THROUGH THESE VARIOUS TERMS AND
	5

1	CONDITIONS AND ALSO THE COVENANTS. WE'VE NOT
2	STRAYED FROM THAT, BUT WE'VE ADDED TO IT. AND WE
3	HAVE AN UPDATED ONE THAT I THINK WILL BE HANDED
4	OUT. IF IT HASN'T BEEN HANDED OUT, IT WILL BE
5	TODAY TO ADD A LITTLE MORE DETAIL. IT'S VERY
6	SIMILAR TO THE ONE THAT WE'VE BEEN WORKING ON, BUT
7	HAS ADDED A COUPLE OF OTHER THINGS.
8	SO WITH THAT, I WOULD LIKE TO SEE, LYNN,
9	IS CHRIS ON THE PHONE?
10	MR. WASDEN: YES.
11	CHAIRMAN ROTH: THIS IS CHRIS WASDEN WHO
12	IS THE PRINCIPAL OF PRICEWATERHOUSE THAT HAS BEEN
13	DOING THE WORK. AND I'M GOING TO ASK CHRIS TO
14	BEGIN AND GIVE US A VERY QUICK UPDATE ON WHAT
15	YOU'VE LEARNED SO FAR, SORT OF THE PROCESS YOU'VE
16	GONE THROUGH, AND SO ON. BEFORE YOU DO THAT, BOB
17	KLEIN HAS A COMMENT.
18	MR. KLEIN: I'D JUST LIKE TO REPORT IN
19	FOR THE ROLL CALL. WITH DUANE, THERE'S ANOTHER
20	CONSTITUENCY THAT WE HAVE BEEN REPORTING TO AND
21	GETTING INPUT FROM TODAY, WHICH IS THE LEGISLATURE.
22	SO I APOLOGIZE FOR BEING A FEW MINUTES LATE. DUANE
23	HAS A LOT OF ASSIGNMENTS FOR US HERE.
24	CHAIRMAN ROTH: SO, YES, I SHOULD HAVE
25	MADE NOTE OF THAT. IT WAS HIGHLY RECOMMENDED BY
	6

1	SOME OF THE PUBLIC THAT WE SPEND SOME TIME WITH THE
2	LEGISLATORS BEFORE WE FINALIZE THIS POLICY. AND
3	THAT WAS ACCOMPLISHED TODAY AND IN OTHER ADDITIONAL
4	MEETINGS THAT WE'VE HAD. I'VE HAD SOME
5	INDIVIDUALLY IN TALKING TO LEGISLATORS ABOUT WHAT
6	THE CONCEPT IS, WHAT THE SCOPE MIGHT BE OF WHAT
7	WE'RE TRYING TO DO. AND I WOULD SAY THAT THOSE
8	MEETINGS HAVE GONE WELL SO FAR. A COUPLE OF ISSUES
9	THAT THEY WANT US TO THINK ABOUT, BUT WE DIDN'T
10	HEAR ANYTHING, AT LEAST I DIDN'T, BOB, THAT WOULD
11	BE TROUBLING FOR MOVING FORWARD WITH THIS.
12	SO WITH THAT NOW, I'D LIKE TO FIRST,
13	ANY OTHER TASK FORCE MEMBERS HAVE A COMMENT OR
14	QUESTION BEFORE WE ASK PRICEWATERHOUSE TO GIVE US
15	AN UPDATE? OKAY. CHRIS, YOU WANT TO GO AHEAD.
16	MR. WASDEN: SURE. ALL RIGHT. WOULD YOU
17	LIKE ME TO GO THROUGH THE PRESENTATION THAT WE
18	HAVE? HAS THAT BEEN HANDED OUT, THE COUPLE OF
19	PAGES WE HAD?
20	CHAIRMAN ROTH: FOR THOSE OF YOU THAT
21	DON'T HAVE A COPY, THEY'RE RIGHT OVER HERE.
22	MR. WASDEN: LET ME GO THROUGH AN
23	APPROACH THAT WE WENT THROUGH, AND THEN I CAN GO
24	THROUGH A SUMMARY OF SOME OF THE FINDINGS THAT
25	WE'VE IDENTIFIED SO FAR.
	7

1	IF YOU TURN TO PAGE 4 OF THE HANDOUT, YOU
2	WILL SEE THAT WE LOOKED AT A LITTLE OVER TWO DOZEN
3	PROGRAMS IN ABOUT 17 DIFFERENT STATES IN THE UNITED
4	STATES, AND THEN WE ALSO LOOKED AT A HANDFUL OF
5	PROGRAMS IN SOME FOREIGN COUNTRIES.
6	MR. GOLDBERG: ARE THESE PUBLICLY
7	AVAILABLE ON THE INTERNET? WE DON'T HAVE ANY AT
8	OUR SITE.
9	CHAIRMAN ROTH: WE'RE GOING TO E-MAIL
10	THEM TO YOU RIGHT AWAY, MICHAEL. WE JUST NOW GOT
11	THEM.
12	MR. WASDEN: AS WE LOOKED THROUGH THE
13	DIFFERENT PROGRAMS, THERE WERE SOME PROGRAMS THAT
14	SEEMED MORE APPROPRIATE THAN OTHERS BASED UPON
15	THINGS SUCH AS ARE THEY STATE-FUNDED PROGRAMS
16	VERSUS REALLY SOMETHING THAT LOOKED MORE LIKE
17	PRIVATE SECTOR ANGEL GROUPS? WERE THEY FOCUSED ON
18	LIFE SCIENCE AND TECHNOLOGY, OR WERE THEY MORE FOR
19	MANUFACTURING TYPE OF INDUSTRIES? WERE THEY
20	PRIMARILY LOAN TYPE OF PROGRAMS? WERE THEY OF
21	MEANINGFUL SIZE? THERE WERE LOTS OF PROGRAMS THAT
22	were doing five, ten, \$20,000 loans that didn't
23	SEEM REALLY AS APPROPRIATE AS A COMPARISON TO WHAT
24	WE'RE LOOKING AT IN CALIFORNIA.
25	AND THEN WE ENDED UP ACTUALLY HAVING

8

1	INTERVIEWS WITH ALL OF THESE INDIVIDUALS AS WELL.
2	SO PART OF IT WAS A RESPONSIVENESS ISSUE, AND ALL
3	THE PEOPLE THAT WE WANTED TO SPEAK WITH, ALL THE
4	PROGRAMS THAT WE WANTED TO EXPLORE, WE WERE ABLE TO
5	ACTUALLY MEET WITH THE PEOPLE AND TALK WITH THEM AT
6	LEAST ONCE, IF NOT SEVERAL TIMES, TO FIND OUT MORE
7	INFORMATION ABOUT THEIR PROGRAMS BECAUSE THE
8	INFORMATION THAT WAS PUBLICLY AVAILABLE ON THE
9	INTERNET WAS SOMEWHAT LIMITED. SO WE ACTUALLY DID
10	AN INTERVIEW PROGRAM WITH EACH OF THEM.
11	CHAIRMAN ROTH: CHRIS, IF I COULD JUST
12	STOP YOU THERE, AND FOR BENEFIT OF THE PEOPLE THAT
13	ARE ON THE PHONE AND STILL DON'T HAVE THE COPIES,
14	THE ORIGINAL LIST OF 30 WAS PARED DOWN TO 12. AND,
15	CHRIS, YOU WANT TO READ THOSE?
16	MR. WASDEN: THE FINAL LIST WE WILL BE
17	FOCUSING ON HERE, FROM THE STATE OF CONNECTICUT,
18	THERE'S THE CONNECTICUT INNOVATION FUND. KENTUCKY,
19	THE ENTERPRISE FUND R&D VOUCHER FUND. KENTUCKY HAD
20	ANOTHER ONE, THE ENTERPRISE FUND GAP FUND.
21	MARYLAND HAD THE MARYLAND VENTURE FUND. MICHIGAN
22	HAD THE MICHIGAN PRE-SEED CAPITAL FUND. NORTH
23	CAROLINA, THE STRATEGIC GROWTH LOANS. NEW JERSEY,
24	THE EDISON INNOVATION FUND. OHIO, THE INNOVATION
25	OHIO LOAN FUND. PENNSYLVANIA HAD TWO THAT WE
	9

1	LOOKED AT, THE NEW PENNSYLVANIA VENTURE CAPITAL
2	PROGRAM AND THE COMPANIES PROGRAM. TEXAS, THE
3	EMERGING TECHNOLOGY FUND. AND THEN WISCONSIN HAD
4	THE TECHNOLOGY VENTURE FUND LOANS.
5	CHAIRMAN ROTH: THANK YOU.
6	MR. WASDEN: TURN TO THE NEXT PAGE, WHICH
7	IS PAGE NO. 6, I GUESS, IT'S NUMBERED. WHAT WE'VE
8	DONE HERE ON THE NEXT TWO PAGES IS WE'VE TAKEN EACH
9	ONE OF THESE 12 DIFFERENT PROGRAMS, AND WE PROVIDED
10	SOME METRICS WITH REGARDS TO THE FUNDS THEMSELVES,
11	THE SIZE, THE SIZE OF TRANSACTIONS, WHEN THEY
12	STARTED, THINGS LIKE THAT. SO LET ME JUST TAKE YOU
13	THROUGH, IF I COULD, EACH ONE OF THE ROW ITEMS, AND
14	WE CAN EXPLORE SOME OF THE FINDINGS THAT WE'VE GOT
15	SO FAR FROM THIS.
16	THE FIRST POINT HAS TO DO WITH FUND SIZE.
17	WHAT YOU WILL FIND IS THAT WHAT CALIFORNIA HAS
18	EMBARKED UPON IS MORE AMBITIOUS THAN ANY OTHER
19	STATE BY ABOUT A FACTOR OF AT LEAST TWO, WHICH THE
20	LARGEST PROGRAM THAT YOU'VE GOT HERE IS TEXAS AT
21	\$270 MILLION. MOST OF THESE PROGRAMS IN MOST OF
22	THESE OTHER STATES, AS YOU CAN SEE, ARE SINGLE
23	DIGIT MILLIONS. AND MANY OF THESE PROGRAMS
24	ACTUALLY HAVE AN ANNUAL ALLOCATION FROM THE STATE,
25	SO IT'S ACTUALLY NOT A FUND. EACH YEAR THEY HOPE
	10

1	TO GET THROUGH APPROPRIATIONS IN THE CASE OF
2	KENTUCKY, FOR EXAMPLE, \$5 MILLION A YEAR FOR THAT
3	PARTICULAR PROGRAM. SO ORDER OF MAGNITUDE THAT
4	WE'RE TALKING ABOUT HERE WITH CALIFORNIA IS
5	SIGNIFICANTLY DIFFERENT FROM MOST OF THESE OTHER
6	FUNDS.

IF YOU LOOK AT THE YEAR STARTED, YOU WILL 7 8 ALSO NOTICE THAT, WITH THE EXCEPTION OF TWO FUNDS, 9 THE ONE IN MARYLAND AND THE ONE IN CONNECTICUT, ALL OF THESE FUNDS STARTED FROM 2000 FORWARD, AND MOST 10 11 OF THE FUNDS ARE ACTUALLY FAIRLY NEW, LESS THAN 12 THREE YEARS OLD. SO THE AMOUNT OF EXPERIENCE THESE 13 FUNDS HAVE HAD IS SUCH THAT WE WEREN'T ABLE TO GET 14 ANY GOOD INFORMATION ABOUT HOW SUCCESSFUL THEY HAVE 15 BEEN BECAUSE THEY HAVEN'T BEEN ABLE TO FIGURE THAT 16 OUT THEMSELVES. MOST OF THE LOANS THAT THEY'VE 17 MADE ARE WITH COMPANIES THAT ARE STILL VIABLE; THAT IS, THEY'RE STILL IN DEVELOPMENT PROCESSES, BUT 18 19 THEY HAVEN'T HAD THAT MANY LIQUIDITY EVENTS, IN 20 FACT, MOST HAVEN'T HAD ANY. MOST ALSO HAVEN'T HAD 21 ANY WRITE-OFFS YET BECAUSE MOST OF THESE LOANS ARE 22 SEVERAL YEARS LONG, AND THEY'VE NOT YET BEEN ABLE 23 TO DETERMINE IF THEY'RE GOING TO HAVE ANY LOSSES 24 FROM THE PROGRAMS. 25 THE NEXT IS THE NUMBER OF INVESTMENTS

11

1	THEY'VE MADE. AND AS YOU CAN SEE, SOME OF THESE
2	PROGRAMS THAT DO THESE VERY SMALL LOANS, AND WE'LL
3	SEE SIZES OF LOANS ON THE NEXT PAGE, BUT HAVE DONE
4	LOTS OF LOANS. SO PENNSYLVANIA IS 335 LOANS IN
5	EIGHT YEARS, LESS THAN EIGHT YEARS, WITH 2.5
6	MILLION PER YEAR OR THEIR ALLOCATION. AND THEN
7	YOU'VE GOT OTHERS LIKE TEXAS, WHICH IS A FAIRLY NEW
8	PROGRAM, THAT'S DONE ABOUT 40. AND WITH THE TEXAS
9	ONE, FOR EXAMPLE, THAT 40 HAS ONLY USED ABOUT HALF,
10	LESS THAN HALF, I BELIEVE, OF THE MONEY THAT'S
11	ALLOCATED FOR THEM.
12	WHEN WE LOOK AT STAGE OF DEVELOPMENT,
13	NEARLY ALL THESE FUNDS ARE FOCUSED ON SEED AND
14	EARLY STAGE DEVELOPMENT ACTIVITY. SO THESE ARE
15	OFTENTIMES WHAT YOU MIGHT CONSIDER FIRST MONEY IN
16	AFTER THE FOUNDERS PUT SOME MONEY IN, BUT THEY TEND
17	TO COME IN FAIRLY EARLY. AND THEN SOME WILL COME
18	IN A LITTLE BIT LATER WITH MONEY FOR A
19	COMMERCIALIZATION ACTIVITY, BUT MOST OF THEM ARE
20	GETTING SOMETHING IN A TRANSLATIONAL MODE TO
21	TRANSLATE IT FROM A UNIVERSITY TO THE MARKETPLACE.
22	AND MANY, IF NOT MOST, OF THESE HAVE AS PART OF
23	THEIR OBJECTIVE THE MOVING OF TECHNOLOGY FROM
24	STATE-FUNDED UNIVERSITIES TO THE MARKETPLACE. AND
25	SO THERE'S OFTENTIMES A REQUIREMENT THAT THE FUNDS
	12

1	BE ASSOCIATED WITH THE UNIVERSITIES IN THE STATE
2	ITSELF.
3	WE LOOKED AT GRANT FUNDING AND WHETHER OR
4	NOT THAT WAS ALLOWED OR COMPLEMENTARY WITH, AND
5	WITH THE EXCEPTION OF ONE PROGRAM IN PENNSYLVANIA,
6	EVERYONE SAID GRANT FUNDING IS FINE IF YOU WANT TO
7	DO THAT WITH THIS, IN CONJUNCTION WITH THIS. AND
8	THEN WE ALSO LOOKED AT WHETHER OR NOT VC'S WERE
9	ALLOWED TO RECEIVE THIS MONEY. AND BY AND LARGE,
10	MOST OF THIS MONEY WAS NOT FOR VC'S. THE MONEY WAS
11	FOR THE COMPANIES THEMSELVES.
12	YOU WILL SEE WHEN WE TALK ABOUT MATCHING
13	IN A MINUTE THAT MOST OF THEM HAVE A MATCHING
14	REQUIREMENT, AND VC'S WILL BECOME MATCHING
15	INVESTORS; BUT MOST OF THESE PROGRAMS WERE
16	SPECIFICALLY TARGETED FOR COMPANIES AND NOT FOR
17	VENTURE CAPITALISTS.
18	WE FOUND A COUPLE OF VERY INTERESTING
19	EXCEPTIONS TO THAT WHERE IN A COUPLE OF SITUATIONS
20	THE FUND WAS ALLOWED TO PROVIDE LOANS TO THE
21	VENTURE CAPITAL FIRMS, WHICH WERE THEN INVESTED IN
22	THE GENERAL PARTNERSHIP AND BECAME PART OF THE
23	FUNDING FOR THE VENTURE CAPITAL FIRM WITH ONLY
24	DEBT-TYPE RETURNS BASED UPON SUCCESS, BUT THEY GOT
25	DIVERSIFICATION THROUGH THAT PROCESS. BUT THEY
	13

1	DIDN'T HAVE ANY SAY AS FAR AS WHERE THE MONEY WENT.
2	AND THE MOST UNUSUAL PROGRAM WE FOUND WAS FROM THE
3	STATE OF UTAH WHERE THE STATE HAD ALLOCATED ABOUT
4	\$200 MILLION TO BE INVESTED IN VENTURE CAPITAL
5	FIRMS THEMSELVES WITHOUT ANY REQUIREMENTS THAT THE
6	VENTURE FIRMS ACTUALLY EVEN DO DEALS IN UTAH.
7	THE HOPE WAS THAT IF THEY MADE THESE
8	INVESTMENTS, THEY COULD DEVELOP RELATIONSHIPS THAT
9	WOULD GET THOSE VENTURE CAPITAL FIRMS TO FOCUS IN
10	UTAH, BUT THEY DIDN'T EVEN HAVE ANY STRINGS
11	ATTACHED, WHICH WE FOUND PRETTY INTERESTING.
12	ALL RIGHT. LET ME GO TO THE NEXT PAGE;
13	AND THEN AFTER THAT, WE CAN HAVE SOME QUESTIONS, I
14	THINK.
15	WHEN WE LOOK ON PAGE 7, HERE WE'RE
16	LOOKING AT SEVERAL DIFFERENT THINGS WITH REGARDS TO
17	LOANS THEMSELVES. WHAT YOU CAN SEE IN THE TOP LINE
18	IS THE AVERAGE LOAN, AND THE SECOND ONE LOOKS AT
19	THE RANGE OF LOANS. AS YOU CAN SEE, MOST OF THESE
20	LOANS ARE REALLY IN ABOUT THE TWO TO \$400,000
21	RANGE. SOME ARE TOWARD THE MILLION DOLLARS IN
22	SIZE, BUT THERE WAS REALLY ONLY ONE PROGRAM, WHICH
23	WAS IN PENNSYLVANIA, WELL, AND THEN TEXAS, AND I
24	CAN EXPLAIN THAT A LITTLE BIT, THAT REALLY DID
25	LOANS OVER A MILLION DOLLARS. AND TEXAS WILL ALSO
	14

1	DO LOANS OVER A MILLION DOLLARS DEPENDING ON THE
2	STAGE OF THE COMPANY.
3	WHAT YOU FOUND IS THAT MOST OF THESE
4	LOANS TENDED TO BE LESS THAN HALF A MILLION OR IN
5	THAT SORT OF RANGE, AND THAT THEY WERE FOR
6	COMPANIES IN EARLY STAGE. AND THOSE THAT HAD
7	LARGER FUNDS, LIKE TEXAS, FOR EXAMPLE, ACTUALLY HAD
8	WITHIN THEIR CHARTER THE EXPECTED MIX OF LOANS
9	BETWEEN DIFFERENT STAGES OF THE DEVELOPMENT OF
10	COMPANIES. SO, FOR EXAMPLE, THEY EXPECT TO DO
11	ABOUT A THIRD OF THEIR PROGRAM IN EARLY STAGE
12	PRE-SEED OPPORTUNITIES, ANOTHER THIRD IN LATER
13	EARLY STAGE OPPORTUNITIES, BUT AS CLOSE TO SEED,
14	AND THEN THE FINAL THIRD WILL BE IN LATER STAGE
15	COMPANIES, AND THEN THE SIZE OF THE LOANS DIFFERED
16	BASED UPON STAGE OF COMPANY AS WELL.
17	SO SOME HAVE VERY MUCH A PORTFOLIO VIEW
18	OF HOW THEY WANT TO DO THIS. OTHERS WILL ACCEPT
19	ALL COMERS, BUT THEY ALL HAVE THESE VARIOUS SIZES
20	OF LOANS.
21	INTEREST RATES FOR THESE LOANS VARIED, AS
22	YOU CAN SEE, ALL OVER THE BOARD. PROBABLY THE MOST
23	COMMON RATE WAS 8 PERCENT. SOME OF THEM WERE PRIME
24	BASED, BUT THE INTEREST RATES WERE IN A FAIRLY
25	TIGHT RANGE GENERALLY FOR THE PROGRAM. THE TERMS
	15

1	OF THE LOANS, THIS IS INTERESTING, ESPECIALLY GIVEN
2	SOME OF THE DISCUSSIONS WE'VE HAD ABOUT THE
3	CALIFORNIA PROGRAM, MOST OF THE PROGRAMS WERE
4	AROUND FIVE YEARS OR SO. THERE WERE THREE THAT
5	WERE TEN YEARS IN TERM, BUT THE RANGE IS CLOSE TO
6	FIVE TO TEN. THERE WERE A FEW THAT WERE ON THE
7	SHORTER SIDE, AS YOU CAN SEE, 18 MONTHS, TWO YEARS,
8	TWO YEARS FOR A COUPLE OF THEM.
9	NEARLY ALL OF THEM HAD A MATCHING
10	REQUIREMENT. WHAT WAS INTERESTING ABOUT THIS WHEN
11	WE PROBED AS TO WHY MATCHING, IT REALLY WASN'T
12	DRIVEN BY A DESIRE TO GET MORE MONEY PER SE FOR THE
13	COMPANIES, ALTHOUGH OBVIOUSLY THAT'S IMPORTANT, BUT
14	IT WAS REALLY DRIVEN MORE FROM A DESIRE TO HAVE A
15	THIRD PARTY VALIDATE THE MANAGEMENT TEAM, VALIDATE
16	THE BUSINESS PLAN, AND VALIDATE THE TECHNOLOGY, AND
17	THEN ALSO TO HAVE THIS THIRD PARTY HELP PROVIDE
18	DISCIPLINE TO THE MANAGEMENT TEAM TO MAKE SURE THAT
19	THIS IS RUN AS A COMMERCIAL ENTERPRISE.
20	BECAUSE A LOT OF THIS IS VERY
21	TRANSLATIONAL IN NATURE, THINGS ARE COMING OUT OF
22	UNIVERSITIES, THEY'VE GOT A LOT OF CONCERNS ABOUT
23	ACADEMIC PEOPLE BEING INVOLVED IN EARLY STAGE
24	BUSINESSES AND REALLY NOT BEING COMMERCIALLY
25	ORIENTED. SO HAVING THIS MATCHING REQUIREMENT
	16

ENABLED THEM TO GET PARTNERS TO THE TABLE THAT ARE
 EXPERTS OR MORE EXPERT IN THIS TYPE OF INVESTING
 THAT COULD VALIDATE AND HELP PROVIDE THE DISCIPLINE
 NECESSARY FOR SUCCESS.

5 WE THEN LOOKED AT USE OF PROCEEDS. AND 6 WITH THE CALIFORNIA PROGRAM, THERE'S BEEN A LOT OF 7 DISCUSSION ABOUT HAVING THIS BE A PROJECT LOAN TYPE 8 OF PROGRAM. WE DID NOT FIND ANY PROGRAMS IN THE 9 UNITED STATES THAT WERE PROJECT FINANCING ORIENTED. 10 MOST OF THEM WOULD HAVE A SPECIFIC PROJECT THAT 11 THEY WERE WORKING ON THAT WOULD BE THE CATALYST FOR 12 RAISING THE MONEY, THAT WOULD BE OUTLINED IN THEIR APPLICATION AND BUSINESS PLAN, BUT THE LOAN WAS NOT 13 14 GENERALLY LIMITED TO THAT USE OR APPLICATION. 15 MOST, IN FACT, ALL THESE LOANS WERE LOANS TO THE 16 COMPANIES THEMSELVES, AND THEY WERE RECOURSE TO THE 17 COMPANY, AND THEY WERE NOT RECOURSE TO THE PROJECT 18 ITSELF.

19 THE ONLY PLACE THAT WE FOUND ANYONE IN 20 THE WORLD THAT DID THESE PROJECT TYPE OF LOANS WAS 21 IN SWEDEN, AND THERE'S ONE PROGRAM WE SAW THERE 22 WHERE THEY DO SOMETHING LIKE THIS. THESE OTHER 23 ONES, AS YOU CAN SEE, IT'S RELATED TO THE COMPANY, 24 THE RECOURSE IS TO THE COMPANY. AND IN THAT WAY 25 SOMETIMES THERE WERE COLLATERAL THAT THEY WOULD

17

1	TAKE, OFTENTIMES NOT. NONE OF THESE THERE WERE
2	TWO ACTUALLY THAT REQUIRED PERSONAL GUARANTEES.
3	THOSE ARE THE ONLY TWO THAT DID NOT HAVE AN EQUITY
4	COMPONENT TO THE LOAN. SO EVERYONE THAT HAD AN
5	EQUITY COMPONENT, AND THAT WAS 10 OUT OF THE 12
6	PROGRAMS, THERE WERE NO GUARANTEES PROVIDED OR
7	REQUIRED.
8	AND MOST OF THEM, IT WAS INTERESTING, WE

9 TALKED ABOUT THINGS SUCH AS COLLATERAL, GUARANTEED 10 SECURITY INTEREST, AND THINGS LIKE THAT, SAID THAT 11 FOR MOST OF THESE COMPANIES, IF THEY FAIL, ALL 12 THERE IS IS INTELLECTUAL PROPERTY. A LOT OF THIS 13 INTELLECTUAL PROPERTY WILL NOT HAVE ACTUALLY EVEN 14 RECEIVED ITS PATENTS YET. AND THESE LENDERS DID 15 NOT WANT TO BE INVOLVED IN TRYING TO DETERMINE 16 WHETHER OR NOT IT HAD ANY VALUE AND THEN TRYING TO 17 FIND A WAY TO DISPOSE OF IT, SO THEY DIDN'T EVEN 18 WANT TO DEAL WITH IT.

AND FINALLY, ONE OTHER THING, AND THERE
WERE LOTS OF OTHER FINDINGS, THESE ARE JUST SUMMARY
FINDINGS, BUT I KNOW ONE OTHER THING THAT WAS OF
PARTICULAR INTEREST, WE'VE HAD PREVIOUS
DISCUSSIONS, HAS TO DO WITH THE ISSUE OF LOAN
SERVICING. AND WHAT WE FOUND IS THAT EVERY SINGLE
PROGRAM SERVICES THEIR OWN LOANS. AND WHEN WE

18

1	ASKED WHY THAT WAS, THE ANSWER WAS ACTUALLY
2	SURPRISINGLY SIMPLE. THEY SAID THESE LOANS,
3	THERE'S NOT VERY MANY THAT WE DO, THAT THERE'S NO
4	SIGNIFICANT LABOR COMPONENT ASSOCIATED WITH THE
5	SERVICING OF THESE LOAN BECAUSE THEY'RE NOT PAYING
6	INTEREST. THERE'S NO ADDITIONAL FOLLOW-ON
7	DILIGENCE THAT WE'RE DOING. THEY'RE COMPANIES THAT
8	ARE REPORTING INFORMATION TO US EVERY QUARTER OR
9	EVERY SIX MONTHS, BUT IT'S COMPANY-REPORTED
10	INFORMATION. SO IT'S NOT A VERY LABORIOUS TASK TO
11	SERVICE THESE OURSELVES, AND WE DON'T HAVE ENOUGH
12	VOLUME THAT IT WOULD BE OF INTEREST TO ANYBODY ELSE
13	TO SERVICE THEM FOR US FOR A FEE. EVERY SINGLE
14	PROGRAM JUST MANAGES THEIR OWN PROCESS, IF YOU
15	WILL, FOR THE LOANS.
16	SO WITH THAT, I WOULD BE HAPPY TO ANSWER
17	ANY QUESTIONS PEOPLE MIGHT HAVE WITH REGARDS TO
18	SOME OF THE PRELIMINARY FINDINGS WE'VE GOT.
19	CHAIRMAN ROTH: SO, CHRIS, THANK YOU FOR
20	THAT OVERVIEW. AND I'M GOING TO OPEN IT UP TO THE
21	COMMITTEE MEMBERS TO SEE IF THERE'S SOME FOLLOW-ON
22	QUESTIONS. BUT BEFORE I DO THAT, JUST THANKS FOR
23	WORKING DOUBLE TIME TO GET US SOMETHING WE COULD
24	LOOK AT HERE TODAY.
25	MICHAEL, HAVE YOU RECEIVED IT YET?
	10

19

1	MR. GOLDBERG: YES, DUANE. THANK YOU.
2	CHAIRMAN ROTH: AND WHO'S AT THE OTHER
3	SITE? MARCY AND TED, HAVE YOU RECEIVED IT?
4	MS. FEIT: YES, I HAVE. THANK YOU.
5	CHAIRMAN ROTH: ANY COMMITTEE MEMBERS?
6	MR. KLEIN: SO THANK YOU FOR YOUR QUICK
7	RESPONSE. I THINK YOU'VE ONLY HAD A CONTRACT FOR A
8	FEW DAYS HERE. AND THIS IS GREAT PRELIMINARY
9	INFORMATION.
10	SO BESIDES THE 8-PERCENT INTEREST RATE,
11	WERE THERE ANY OF THESE THAT WERE ASKING FOR
12	WARRANTS OR OTHER CONSIDERATION FOR THE LOANS?
13	MR. WASDEN: YES. TEN OUT OF 12 PROGRAMS
14	HAD EQUITY COMPONENTS EITHER IN THE FORM OF
15	WARRANTS OR CONVERTIBLE DEBT.
16	MR. KLEIN: HOW SIGNIFICANT WERE THOSE
17	WARRANTS OR CONVERTIBLE DEBT AS A PERCENTAGE OF THE
18	YIELD? WHAT WOULD THE YIELD BE IF YOU FIGURE THOSE
19	IN ON A THEORETICAL BASIS BECAUSE OBVIOUSLY SOME
20	ARE GOING TO DEFAULT?
21	MR. WASDEN: I THINK A COUPLE OF THINGS
22	THAT I'D LIKE TO POINT OUT ABOUT HOW THOSE WERE
23	STRUCTURED. ONE IS THAT WHEN WE ASKED THEM ABOUT
24	WHETHER OR NOT THEY PREFERRED ONE OR THE OTHER,
25	MOST OF THEM ACTUALLY PREFERRED CONVERTIBLE DEBT TO
	20

1	WARRANTS BECAUSE THERE WAS A FEELING THAT WITH
2	WARRANTS YOU NEED TO PRICE THE WARRANT UP FRONT,
3	AND THEY DIDN'T WANT TO GET INTO A PRICING OF THE
4	WARRANT, THAT IS, THE STRIKE PRICE OF THE WARRANT
5	UP FRONT WITH THE COMPANY, FOR TWO REASONS.
6	ONE IS THAT THEY DIDN'T FEEL THAT THEY
7	HAD THE CAPABILITY TO PRICE THE VALUE OF THE
8	COMPANY, AND ALSO IT CREATES A CONTENTIOUS
9	RELATIONSHIP AS OBVIOUSLY THE COMPANY WANTS A HIGH
10	VALUE AND THE ONE PROVIDING THE LOAN WANTS A LOW
11	VALUE. WHEREAS, THE CONVERTIBLE DEBT, YOU COULD
12	JUST SAY THAT IT HAS CONVERSION PREMIUM OF 20
13	PERCENT ON TOP OF THE LOAN. AND SO IT'S ALL
14	FORMULAIC AND EASY TO EXECUTE. AND THERE'S
15	STANDARD INDUSTRY BENCHMARKS WITH REGARDS TO
16	CONVERSION PREMIUMS, AND SO IT JUST MADE IT VERY
17	SIMPLE TO DO A CONVERTIBLE DEBT VERSUS A WARRANT.
18	NOW, SOME STATES COULD NOT DO CONVERTIBLE
19	DEBT, AND SO THEY END UP DOING WARRANTS INSTEAD.
20	AS FAR AS TRYING TO IMPUTE WHAT THE YIELD
21	IS, IT'S DIFFICULT BECAUSE THE EQUITY COMPONENT
22	DOESN'T HAVE A YIELD EQUIVALENT METRIC. AND, IN
23	FACT, UNTIL THE EQUITY IS CONVERTED AT A
24	LIQUIDATION EVENT, YOU DON'T KNOW WHAT IT WILL BE
25	WORTH.
	01

21

1	ANECDOTALLY, IN PENNSYLVANIA WHEN WE
2	ASKED THE QUESTIONS THAT HAD TO DO WITH LIQUIDITY
3	EVENTS AND WHY ARE THEY DOING DEBT WITH EQUITY
4	INSTEAD OF JUST DEBT, THEIR ANSWER WAS THAT BEFORE,
5	WHEN THEY WERE JUST DOING LOANS AND THEY WOULD HAVE
6	SOME SUCCESS, THEY WOULD GET THEIR LOAN BACK PLUS
7	THEIR INTEREST OF 8 PERCENT; WHEREAS, THE
8	COINVESTORS THAT INVESTED IN EQUITY AT THE SAME
9	TIME AS THE STATES PROGRAM WERE GETTING SEVEN TIMES
10	THEIR MONEY BACK. SO BY PROVIDING DEBT WITH
11	EQUITY, NOW THEY'RE LOOKING TO GET THREE OR FOUR
12	TIMES THEIR MONEY BACK. SO THAT KIND OF GIVES YOU
13	A FEEL FOR THE YIELD COMPONENT, BUT IT'S NOT
14	GENERALLY THOUGHT OF KIND OF IN THAT SAME INTEREST
15	RATE YIELD MANNER.
16	CHAIRMAN ROTH: SO BEFORE I GO ON, I WANT
17	TO INTRODUCE JOHN HALE, WHO'S SITTING HERE AT THE
18	FRONT TABLE. JOHN IS A LAWYER WITH COOLEY GODWARD.
19	I CAN'T SAY THE NEW NAME.
20	MR. HALE: CLOSE ENOUGH.
21	CHAIRMAN ROTH: IT'S CLOSE ENOUGH.
22	COOLEY GODWARD IS HOW WE KNOW. WE'VE RETAINED JOHN
23	TO HELP US TODAY WITH OUR DISCUSSION ABOUT WARRANTS
24	AND EQUITY BECAUSE THAT'S AN AREA HE SPECIALIZES
25	IN. I'M GOING TO GIVE JOHN JUST A MINUTE OR TWO
	22

1	HERE TO ADD ANYTHING THAT HE MIGHT WANT TO QUESTION
2	ON THIS PARTICULAR DUE DILIGENCE PIECE THAT CHRIS
3	IS WORKING ON.
4	MR. HALE: SO, CHRIS, IT WOULD BE
5	INTERESTING TO KNOW. NONE OF THESE COMPANIES HAS
6	YET HIT A LIQUIDITY EVENT, SO WE DON'T KNOW WHETHER
7	THEY'RE IN THE MONEY IN RESPECT OF THE WARRANTS?
8	MR. WASDEN: SO THERE HAVE BEEN WITH A
9	COUPLE OF THE STATE PROGRAMS SOME LIQUIDITY EVENTS.
10	BY AND LARGE, MOST OF THE PROGRAMS ARE SO NEW THAT
11	THERE HAVE NOT BEEN MANY.
12	CHAIRMAN ROTH: ANY OTHER MEMBERS ON THE
13	PHONE WOULD LIKE TO ASK A QUESTION OF CHRIS?
14	MR. GOLDBERG: THANK YOU. AS YOU'VE
15	TAKEN A LOOK, PERHAPS, OR MIGHT YOU GO BACK AND
16	LOOK AT THE SIZE OF GRANTS OR GRANT PROGRAMS BY
17	VARIOUS STATES, PERHAPS IT WOULD BE HELPFUL TO US
18	IF THEY CAN BE INDEXED AGAINST SOME SORT OF
19	RELEVANT METRIC LIKE POPULATION OF THE STATE OR
20	STATE GDP BECAUSE, QUITE FRANKLY, ANYTHING
21	SUB-MILLION DOLLAR SCALE ISN'T GOING TO REALLY MOVE
22	A NEEDLE IN THE SORTS OF ORGANIZATIONS THAT THIS
23	PROGRAM WOULD BE TRYING TO REACH.
24	MR. WASDEN: SURE. SURE. KIND OF AS A
25	QUICK OFF-THE-TOP-OF-THE-HEAD SORT OF MEASURE, AS
	23

1	YOU'RE TALKING ABOUT, IF YOU LOOK AT PAGE 7, WHAT
2	DO WE KNOW ABOUT TEXAS, FOR EXAMPLE? TEXAS HAS A
3	POPULATION A LITTLE BIT OVER HALF THE SIZE OF THE
4	STATE OF CALIFORNIA AND HAS A COMMENSURATE GDP. SO
5	TEXAS IS A STATE THAT'S ABOUT HALF YOUR SIZE IN
6	POPULATION AND GDP AND HAS PROGRAMS, AS YOU CAN
7	SEE, THAT ARE IN THE 250,000 TO \$1.5 MILLION RANGE.
8	CHAIRMAN ROTH: THEY'RE NOT NEARLY AS
9	INNOVATIVE AS WE ARE OUT HERE IN CALIFORNIA. YOU
10	HAVE TO REMEMBER THAT.
11	CHAIRMAN ROTH: MY COMMENT, I THINK, IS
12	ALONG THE SAME LINE. THAT'S ONE OF THE THINGS,
13	CHRIS, I THINK WE NEED TO CONSIDER. THIS IS GREAT
14	TO HAVE SORT OF A BASELINE WHAT I WOULD CALL SEED
15	LOAN PROGRAMS. I THINK WHAT WE'RE TALKING ABOUT IS
16	A LITTLE BEYOND THAT. WE'RE TALKING ABOUT
17	TRANSLATIONAL MEDICINE AS THE PRIMARY. WE WANT
18	PRODUCTS, NOT PROJECTS OR TECHNOLOGIES, BUT
19	PRODUCTS THAT ARE MOVING THROUGH TOWARDS
20	COMMERCIALIZATION.
21	AND SO PERHAPS THE VENTURE DEBT WOULD BE
22	AT THE OTHER END OF THE SPECTRUM WE'RE TALKING
23	ABOUT WHERE SILICON VALLEY BANK OR COMERICA OR
24	SQUARE ONE, THOSE TYPES OF BANKS WHO ARE MAKING THE
25	LOANS THAT THEY BELIEVE WITH GREAT ASSURANCE
	24

1	THEY'RE GOING TO GET THEIR MONEY BACK, BUT THEY'RE
2	ALSO TAKING WARRANT COVERAGE AND SOME CASES
3	CONVERTIBLE DEBT. SO STUDYING THEIR SCOPE OF
4	INVESTMENT, PARTICULARLY IN LIFE SCIENCE, MIGHT
5	BRACKET WHAT I THINK WE'RE LOOKING AT. WE'RE
6	LOOKING AT EARLY STAGE PROGRAMS, AND THOSE THAT
7	WOULD BE FOLLOW-ON FINANCING TO WHAT WE'RE DOING
8	THAT WOULD BE LARGER IN SIZE, BUT WITH A LOT MORE
9	SECURITY AND ALL KINDS OF ASSURANCES THEY'RE GOING
10	TO BE REPAID.
11	MR. WASDEN: I THINK, DUANE, YOU MAKE A
12	VERY IMPORTANT POINT. THAT IS THAT LOOKING AT
13	STATE PROGRAMS FOR WHAT CALIFORNIA'S AMBITION IS IS
14	PROBABLY NOT LOOKING AT THINGS THAT ARE COMPARABLE
15	TO WHAT CALIFORNIA WANTS TO DO BECAUSE THERE ARE NO
16	STATE PROGRAMS, AS YOU CAN SEE, THAT ARE OF THE
17	SORT OF PROFILE THAT YOU JUST DESCRIBED. SO I
18	THINK IF WE LOOK AT SILICON VALLEY BANK, COMERICA,
19	THEY HAVE A PROGRAM AS WELL, WE CAN LOOK AND SEE
20	HOW THEIR PROGRAMS WORK, AND THAT MIGHT BE MORE
21	COMPARABLE TO WHAT YOU HAVE IN MIND.
22	CHAIRMAN ROTH: JOHN, ANY THOUGHTS OTHER
23	BANKS THAT WE MIGHT WANT TO TALK WITH ABOUT THEIR
24	TERMS AND CONDITIONS?
25	MR. HALE: SO THE BANKS THAT LEND INTO
	25

1	THE VENTURE MARKET AND HAVE FAIRLY DECENT
2	PORTFOLIOS OF WARRANTS WOULD BE SVB. THEY'VE BEEN
3	THERE THE LONGEST, PROBABLY FOR THE LAST 25 IT'S
4	THEIR 25TH ANNIVERSARY, SO THE LAST 25 YEARS.
5	COMERICA PROBABLY SECOND IN SIZE. SQUARE ONE WOULD
6	BE THIRD. THEY'RE FORMER COMERICA, STARTED OFF
7	THEIR OWN BANK JUST A COUPLE YEARS AGO. BRIDGE
8	BANK IN SANTA CLARA, AGAIN REFUGEES FROM ONE OF THE
9	OTHER BANKS, HAVE PORTFOLIOS THAT THEY'VE
10	ESTABLISHED OVER THIS LAST FEW YEARS. THAT'S ON
11	THE BANK SIDE.
12	NOW, THERE ARE A NUMBER OF VENTURE FUNDS
13	THAT HAVE STARTED UP OVER THE PAST FIVE YEARS OR
14	SO, BASICALLY GUYS THAT WERE WITH BANKS, DECIDED
15	THEY COULD MAKE A LOT MORE MONEY BY GOING OFF ON
16	THEIR OWN AND DOING DEALS THAT ARE NOT REGULATED BY
17	BANKS. AND THERE'S A HANDFUL OF THOSE OUTFITS AS
18	WELL THAT HAVE FAIRLY EXTENSIVE WARRANT PORTFOLIOS.
19	I CAN GIVE YOU THE NAMES NOW OR LATER IF YOU WANT
20	IT.
21	CHAIRMAN ROTH: I THINK, CHRIS, IT WOULD
22	BE GOOD IF WE COULD IDENTIFY EACH OF THE ONES THAT
23	JOHN JUST DESCRIBED FOR US. TAKE A COUPLE OF THE
24	EXISTING VENTURE BANKS AND THEN TAKE SOME OF THESE
25	NEW PORTFOLIOS THAT ARE MAKING INVESTMENTS, NOT
	26

1	WHERE WE ARE IN THE EARLY, EARLY STAGE, BUT MORE
2	YOU NEED A LOAN TO GET TO THIS MILESTONE, WHICH
3	WILL GET YOU ADDITIONAL FINANCING, BUT THERE'S SOME
4	SECURITY THERE THAT IS MUCH MORE DIFFERENT THAN
5	WHAT WE'RE GOING TO BE LOOKING AT.
6	MR. HALE: THERE ARE SOME FUNDS THAT
7	ACTUALLY ARE DOING JUST LATER STAGE COMPANIES NOW.
8	SO THEY'VE SEEDED THE SEED STAGE, THE SMALL COMPANY
9	STAGE, TO SOME OF THE BANKS AND TO A COUPLE OF THE
10	OTHER FUNDS. THEY SAY OUR TARGET IS THE MORE
11	MATURE COMPANIES. THEY ALREADY HAVE SOME KIND OF
12	CASH FLOW. WE THINK THERE ARE PRODUCTS THAT ARE
13	ABOUT TO BE MARKETED.
14	CHAIRMAN ROTH: ALWAYS MOVING US IN THE
15	VALLEY OF DEATH. WE DON'T SEEM TO ESCAPE THAT.
16	MR. KLEIN: TO REFINE THAT, JOHN, THE
17	COMPANIES YOU'RE REFERRING TO ARE IN MORE
18	ESTABLISHED AREAS OF THE BIOMEDICAL MARKET AS
19	VERSUS THE STEM CELL MARKET.
20	MR. HALE: THEY ARE.
21	MR. KLEIN: BECAUSE THE STEM CELL MARKET
22	IS TOO NEW TO GET THE BENEFIT OF THAT TRANSLATIONAL
23	MEDICAL FUNDING. IS THAT A CORRECT STATEMENT?
24	MR. HALE: ABSOLUTELY CORRECT. I MEAN
25	THERE ARE NO STEM CELL COMPANIES.
	27

1	MR. KLEIN: WELL, THERE ARE STEM CELL
2	COMPANIES, BUT THERE'S NOT STEM CELL VENTURE FUNDS
3	OR STEM CELL TRANSLATIONAL DEVELOPMENT. THERE ARE
4	SOME REAL SIZE CHALLENGES THAT DUANE HAS REFERENCED
5	BECAUSE, EVEN THOUGH WE MAY FOLLOW THIS MODEL OF
6	MATCHING FUNDS TO BE SIGNIFICANT AT EACH MILESTONE,
7	WE'RE GOING TO HAVE TO HAVE SUBSTANTIALLY GREATER
8	DOLLAR AMOUNTS THAN THIS IN THE STAGE OF
9	DEVELOPMENT WE'RE IN. IS THAT CORRECT? WE'RE
10	TALKING ABOUT IF WE'RE TALKING ABOUT A PHASE I
11	CLINICAL TRIAL, AS THEY GO THROUGH THE MILESTONES,
12	TOXICITY TESTING, ETC., THEY'RE GOING TO HAVE \$75
13	MILLION SOMEWHERE WRAPPED UP IN THAT, DEPENDING
14	UPON, OF COURSE, WHAT THE SUBJECT IS. THERE'S A
15	WHOLE RANGE OF DIFFERENT PROTOCOLS DEPENDING UPON
16	WHAT THE TARGET IS OF THAT THERAPY.
17	MR. HALE: AND THE TIME TOO IS VERY
18	DIFFERENT.
19	CHAIRMAN ROTH: SO THAT WOULD BE MORE THE
20	COMPLETE CLINICAL PROGRAM, THE PHASE I, THE
21	PRECLINICAL THROUGH PHASE I. I THINK WE'RE
22	PROBABLY IN THE THREE TO \$5 MILLION RANGE AS
23	OPPOSED TO MORE THAN THAT.
24	MR. WASDEN: SOMETHING TO KEEP IN MIND
25	TOO WHEN YOU TALK ABOUT SILICON VALLEY BANK AND
	28

1	COMERICA, TWO THAT I'M MOST FAMILIAR WITH I
2	WORKED WITH THEM ON THESE TYPES OF PROGRAMS
3	BEFORE IS THAT THEY TEND TO LIMIT THEIR LENDING
4	PROGRAMS TO COMPANIES THAT HAVE ALREADY RECEIVED A
5	SERIES A ROUND OF FINANCING AND ARE BETWEEN A
6	SERIES A AND A SERIES B. SO YOU'RE TALKING ABOUT
7	LENDING TO ORGANIZATIONS THAT HAVE ALREADY RECEIVED
8	GENERALLY THE AVERAGE SERIES A ROUND OF FINANCING
9	IN THE KIND OF TWO TO $\$5$ MILLION RANGE, AND THAT'S
10	WHEN A SILICON VALLEY BANK COMES IN. THEY
11	GENERALLY THERE ARE SOME EXCEPTIONS, BUT THEY
12	GENERALLY DON'T COME IN PRE-SERIES A ROUND OF
13	FINANCING.
14	CHAIRMAN ROTH: CORRECT. THAT'S WHY I
15	SAY I THINK WE'RE SOMEWHERE BETWEEN THE PROGRAMS
16	YOU'VE IDENTIFIED WITH THE EXCEPTION OF MAYBE TEXAS
17	AND ONE OTHER AND THE VENTURE BANK APPROACH. AND
18	THAT'S AN AREA THAT WE'D CERTAINLY THINK THAT OUR
19	NUMBERS WOULD BE CONSIDERABLY HIGHER FOR WHAT WE'RE
20	TRYING TO DO WITH THIS PROGRAM IN TERMS OF THE PER
21	INVESTMENT PER PRODUCT INVESTMENT AREA COMPARED
22	TO THESE.
23	SO LET ME SEE IF THERE ARE OTHER COMMENTS
24	FROM THE COMMITTEE FOR CHRIS BECAUSE I WANT TO MAKE
25	SURE CHRIS LEAVES KNOWING WHAT WE'D LIKE IN
	29

1	ADDITION TO WHAT HE'S ALREADY GIVEN US A
2	PRELIMINARY ON.
3	MR. SHEEHY: I JUST WONDERED IF YOU MIGHT
4	BE ABLE TO FIND OUT A LITTLE BIT MORE ABOUT THE
5	MATCH BECAUSE I THOUGHT THE POLICY GOALS THAT THEY
6	WERE ACHIEVING WITH THAT, IF THERE'S CERTAIN
7	RATIOS, CERTAIN MINIMAL AMOUNTS THAT CAN BE
8	ACHIEVED, BECAUSE IT SEEMS LIKE THAT THAT MIGHT
9	ADDRESS SOME OF OUR ANTICIPATED SHORTCOMINGS
10	BECAUSE THEY GET VALIDATION, SOME OF THE DUE
11	DILIGENCE IS DONE WHEN THEY HAVE THE MATCH. SO IF
12	THERE'S SOME WAY TO FIGURE OUT. AND THEY SEEM TO
13	BE ALL OVER THE PLACE FROM, YOU KNOW, A GOOD BIT
14	MORE TO JUST A PIECE OF A MATCH. BUT I'M JUST
15	CURIOUS AS TO HOW THAT MIGHT BE AN IMPACT BECAUSE
16	IF THAT COULD HELP US IN TERMS OF MAKING SURE THAT
17	WE PICK THE RIGHT PARTNER TO DO THIS WITH.
18	CHAIRMAN ROTH: SO MY THOUGHT ON THAT,
19	JEFF, IT WOULD BE AWFULLY NICE IF EVERYBODY COULD
20	COME FORWARD WITH ANOTHER CHUNK OF MONEY IN HAND,
21	BUT I THINK THE PRACTICALITY OF THAT, GIVEN THE
22	CYCLE OF OUR REVIEW AND GETTING THE TIMING RIGHT
23	AND HAVE IT HOLD THROUGH THE REVIEW, MIGHT BE
24	DIFFICULT.
25	THE THING I WOULD LOOK FOR THERE IS WHAT
	30

1	HAS GONE INTO THE PRODUCT SO FAR TO GET IT TO A,
2	QUOTE, PRODUCT, WHETHER THAT WAS NIH FUNDING OR
3	ADDITIONAL FUNDING, BOOTSTRAP OR ANGELS OR ANYTHING
4	THAT WENT INTO THAT, TO GET IT WHERE IT IS NOW
5	BEING PRESENTED.
6	AND THE SECOND PART OF THAT WOULD BE
7	THAT, REMEMBER, THIS SCIENTIFIC REVIEW, THE MERITS
8	OF THAT PRODUCT ARE GOING TO BE REVIEWED OUTSIDE BY
9	THE GRANTS WORKING GROUP, WHICH GIVES US SOME
10	SCIENTIFIC CREDIBILITY THAT THIS, IN FACT, IS A
11	GOOD PROGRAM, A GOOD PRODUCT THEY WOULD RECOMMEND
12	FOR FUNDING. SO I THINK WE'D GET A LITTLE BIT
13	MR. WASDEN: A COUPLE THINGS ON THE
14	MATCHING. WHAT YOU FIND IS THAT THERE'S TWO
15	DIFFERENT MATCHING MODELS OUT THERE. ONE MATCHING
16	MODEL SAYS THAT YOU HAVE TO HAVE A MATCH CONCURRENT
17	WITH RECEIVING OUR FUNDS. AND THE OTHER MATCHING
18	MODEL SAYS THAT YOU HAVE TO HAVE A MATCH WITHIN A
19	PERIOD OF TIME AFTER RECEIVING OUR FUNDS. SO IT
20	DEPENDS ON WHETHER OR NOT THE STATE WANTS TO TAKE
21	THE RISK THAT YOU CAN ACTUALLY MATCH VERSUS NOT
22	WANTING TO TAKE THAT RISK AND MAKING YOU MATCH UP
23	FRONT.
24	WHAT YOU FIND IN THOSE TWO DIFFERENT
25	SITUATIONS, OBVIOUSLY, IS A LITTLE BIT OF A GAMING
	31

1	THAT GOES ON. AND ORGANIZATIONS GENERALLY THAT
2	STATES THAT GENERALLY LET PEOPLE MATCH
3	AFTERWARDS PROVIDES SOMETHING ATTRACTIVE FOR FUTURE
4	INVESTORS BY SAYING, LOOK, WE'VE ALREADY PUT OUR
5	MONEY BEHIND THIS THING, WE'VE TAKEN SOME OF THE
6	RISK OUT OF THIS; THEREFORE, NEW INVESTORS THAT
7	COME IN, YOU'RE NOT TAKING AS MUCH RISK AS YOU
8	WOULD IF WE MADE YOU COME IN BEFOREHAND OR WHATNOT.
9	THAT'S THE FIRST THING ON MATCHING. AND
10	THE SECOND THING IS THAT WE TALKED TO STATES
11	SPECIFICALLY ABOUT THIS ISSUE OF ARE YOU HAVING THE
12	MATCH TO VALIDATE THE TECHNOLOGY, OR ARE YOU HAVING
13	THEM MATCH FOR OTHER REASONS? ALMOST EVERY ONE OF
14	THEM SAID IT'S NOT ABOUT THE TECHNOLOGY. IT'S
15	ABOUT HAVING SOMEONE MATCH TO VALIDATE THE MARKET
16	OPPORTUNITY, THE MANAGEMENT TEAM, THE BUSINESS
17	DISCIPLINE. SO IT'S MORE OF THOSE COMMERCIAL
18	ISSUES, NOT THE SCIENTIFIC ISSUES THAT WERE REALLY
19	WHAT WAS DRIVING THE DESIRE TO MATCH.
20	MR. SHEEHY: THAT'S EXACTLY MY POINT. I
21	WAS LOOKING, AND I WOULD BE VERY COMFORTABLE WITH
22	THE FORWARD-LOOKING MATCH. IT'S EXACTLY THOSE
23	COMMERCIAL ASPECTS I THINK WE'RE GOING TO HAVE THE
24	MOST DIFFICULT TIME DOING IN-HOUSE THAT I THINK
25	MIGHT BE USEFUL. I THINK IT WOULD BE VERY
	32

1	ATTRACTIVE. I'M NOT A BUSINESS PERSON, BUT IF WE
2	COULD HELP PEOPLE LEVERAGE ADDITIONAL FUNDS. WE'VE
3	DONE THAT BEFORE.
4	CHAIRMAN ROTH: MY VIEW OF LEVERAGE HERE
5	IS A LITTLE BIT DIFFERENT THAN WE'VE DONE BEFORE
6	WITH MATCHING FUNDS. IT IS LEVERAGING FUTURE
7	CAPITAL THAT'S GOING TO BE NECESSARY TO GET THIS
8	ALL THE WAY HOME AS OPPOSED TO TRYING TO LEVERAGE
9	HERE AND THEN LEVERAGE AGAIN. SO THAT'S ONE THING.
10	THE OTHER THING, AND I DON'T WANT THIS TO
11	SOUND HIGH-MINDED, BUT CALIFORNIA IS VERY
12	SOPHISTICATED COMPARED TO SOME OF THESE OTHER
13	STATES IN BEING ABLE TO EVALUATE THE GOOD FROM THE
14	BAD FROM OTHERWISE. I THINK WE IN THE STATE HAVE
15	PLENTY OF RESOURCES, AND PART OF OUR PROPOSAL HERE
16	IS THAT THERE BE A REVIEW OF THE BUSINESS PLAN,
17	THAT IT'S CREDIBLE, AND GET THAT DONE. THAT
18	DOESN'T NECESSARILY HAVE TO BE DONE BY CIRM, BUT IT
19	NEEDS TO HAVE A REVIEW THAT SOMEBODY LOOKS AT AND
20	SAYS THIS IS A CREDIBLE PLAN. AND THE MANAGEMENT
21	TEAM, WE HAVE A BACKGROUND REQUIREMENT ON THE
22	MANAGEMENT TEAM.
23	SO I THINK WHERE I WOULD BE IF I WERE IN,
24	I'LL PICK A STATE, HOPE I DON'T OFFEND ANYBODY, BUT
25	KENTUCKY I'M GOING TO LOOK AT A LITTLE DIFFERENT
	33

1	THAN I WOULD COMING OUT OF THE KINDS OF GRANTS THAT
2	I THINK WE'RE GOING TO GET.
3	MR. KLEIN: FOLLOWING ON YOUR POINT,
4	DUANE, I THINK AS WE MENTIONED BEFORE, ON THE
5	DELEGATED UNDERWRITING MODEL THAT FANNIE MAE USES
6	FOR LOANS IN THE HOUSING AREA, WE COULD GO TO
7	SILICON VALLEY BANK OR COMERICA. WE COULD PUT OUT
8	AN RFA, HAVE THEM COMPETE, AND THEN HAVE THEM AS
9	DELEGATED UNDERWRITERS WITH RISK SHARING OR WITHOUT
10	RISK SHARING SO THAT WE HAVE, IN FACT, AN EXPERT
11	EXTERNAL REVIEW ON THE BUSINESS SIDE BECAUSE WE'RE
12	NOT GOING TO INTERNALIZE THAT EXPERTISE ON A
13	PREDICTABLE MANNER AND CERTAINLY NOT WITH THE
14	CREDIBILITY THAT WE CAN ON A CONTRACT BASIS WITH
15	INSTITUTIONS THAT ARE PROVEN OVER A NUMBER OF
16	YEARS. SO THAT'S A GOOD WAY TO GET PROVEN
17	UNDERWRITING WITH A HISTORY TO IT.
18	BUT THE OTHER SIDE OF THIS IN TERMS OF
19	SCALE, CHRIS, LET ME MAKE SURE THAT WE'RE TALKING
20	ABOUT THE RIGHT SCALE BECAUSE IN THE TRANSLATIONAL
21	FIELD WITH HUMAN TRIALS BETWEEN THE PRECLINICAL
22	WORK AND THE IND WORK, THE PHASE I WORK, PHASE II
23	WORK, WE COULD HAVE 100 MILLION HERE THAT A
24	COMPANY NEEDS TO GET THROUGH THIS. AND THEY MAY
25	NEED \$50 MILLION FROM US EVEN WITH A \$50-MILLION
	34

34

1 MATCH. 2 MR. WASDEN: I THINK A COUPLE OF THINGS 3 THAT WE NEED TO LOOK AT WITH REGARDS TO THE PROCESS 4 AND HOW THAT WORKS. IT HAS TO DO WITH WHAT STAGE YOU'RE GOING IN AT, BUT EVEN A COMPANY THAT GETS 50 5 6 OR \$100 MILLION THROUGH A TIME SERIES TO GO THROUGH CLINICAL I, II, AND III PHASES ISN'T GETTING A 7 8 HUNDRED MILLION UP FRONT. 9 MR. KLEIN: THAT'S RIGHT. MILESTONE 10 DRIVEN. MR. WASDEN: THEY'RE GOING TO GET A 11 12 COUPLE MILLION THAT GETS THEM PRECLINICAL, THEY'RE 13 GETTING MAYBE FIVE MILLION THAT TAKES THEM THROUGH 14 PHASE I, THEY'RE GETTING 10 MILLION PHASE II, 15 THEY'RE GETTING 70 MILLION FOR PHASE III. SO IT'S 16 THAT STEPPING UP BASED UPON MILESTONES. AS THEY 17 ACHIEVE THOSE, THEN ADDITIONAL CAPITAL IS OBTAINED. 18 CHAIRMAN ROTH: SO, MICHAEL, YOU WANT TO 19 MAKE A COMMENT HERE? MY CAUTION WOULD BE THAT I 20 THINK WE'RE GETTING TO THE UPPER -- WAY UPPER 21 LIMITS OF WHAT WE MIGHT BE DOING HERE WITH THESE 22 LOANS. I WOULD NOT PERSONALLY ENVISION THAT WE'RE 23 GOING TO BE MAKING OR NEED TO MAKE THAT SCALE OF 24 LOAN TO COMPANIES THAT ARE THAT FAR ALONG TO MAKE A 25 BET OF 50 OR \$100 MILLION.

35

1	MR. KLEIN: I'M NOT SUGGESTING WE'RE AT
2	\$100 MILLION, AND I'M NOT SUGGESTING THAT WE'RE IN
3	PHASE III, BUT THROUGH PHASE II, DEPENDING UPON THE
4	COMPLEXITY OF THE PROCEDURE AND GIVEN THAT THE FDA
5	IS GOING TO BE EXTREMELY CONSERVATIVE ON THE FRONT
6	END, I THINK WE COULD RUN AND FIND OURSELVES
7	CREDIBLY WITH OUTSIDE VALIDATION FROM THE BANKING
8	INDUSTRY AND OTHER INDUSTRIES IN A FIELD WHERE WE
9	HAD 25 TO 50 MILLION IF THERE WAS A LOT OF
10	VALIDATION, A LOT OF COINVESTMENT, AND A LOT MORE
11	MONEY OUT BEFORE WE EVER PUT ANY MONEY UP.
12	MR. WASDEN: THIS IS WHY DIFFERENT STATES
13	HAVE APPROACHED THIS FROM A PORTFOLIO PERSPECTIVE,
14	SAYING WE NEED TO DECIDE UP FRONT HOW MUCH OF OUR
15	CAPITAL WE'RE GOING TO BE INVESTING IN WHAT STAGE
16	OF DEVELOPMENT OF THE COMPANY AND HOW MUCH WOULD BE
17	THE AVERAGE SIZE OF THE LOAN IN THAT STAGE. SO
18	THAT IF WE'RE GOING PRECLINICAL, PRE-IND SORT OF
19	WORK, WE'RE GOING TO DO A THIRD OF OUR PORTFOLIO
20	FOR THAT AT A MILLION DOLLARS PER INVESTMENT. AND
21	THEN WE'RE GOING TO DO A THIRD OF OUR PORTFOLIO FOR
22	PHASE I TRIALS AND A THIRD OF OUR PORTFOLIO FOR
23	PHASE II, AND THEN THOSE EACH HAVE A DOLLAR LIMIT
24	TO THEM. AND THAT'S ONE WAY THAT, FOR EXAMPLE,
25	STATE OF TEXAS HAS LOOKED AT IT FROM A PORTFOLIO
	36

1	PERSPECTIVE AND CAPITAL ALLOCATION AND
2	DECISION-MAKING EACH TIME THAT THEY ALLOCATE
3	CAPITAL.
4	CHAIRMAN ROTH: MICHAEL OR TED, EITHER
5	ONE OF YOU HAVE COMMENTS?
6	MR. GOLDBERG: MY REACTION IS THAT THAT
7	APPROACH SEEMS TO MAKE SOME SENSE TO ME. AND, IN
8	FACT, THERE ARE ALGORITHMS FOR PORTFOLIO MANAGEMENT
9	THAT ARE USED IN THE SECURITIES INDUSTRY ROUTINELY.
10	AND I THINK ONE OF THE THINGS THAT WE MAY WANT TO
11	DO IS, AND I HAVE SOME IDEAS ABOUT HOW WE MIGHT
12	WANT TO APPROACH IT, IS USE SOME OF THOSE
13	TECHNIQUES TO MODEL VARIOUS PORTFOLIO
14	CONFIGURATIONS AND TRY TO ACHIEVE SOME SORT OF RISK
15	ADJUSTED EQUILIBRIUM THAT WE'RE ALL COMFORTABLE
16	WITH. AND SOME OF THAT IS GOING TO BE AFFECTED BY
17	SIZE OF SPECIFIC LOANS. SOME OF IT'S GOING TO BE
18	AFFECTED BY RELATIVE RISK OF SPECIFIC LOANS. AND
19	THERE MIGHT BE SOME OTHER FACTORS THAT WE COULD ADD
20	TO THAT MODEL.
21	BUT THE NOTION OF THINKING ABOUT THIS AS
22	WE'RE LOOKING AT THIS FROM A POLICY STANDPOINT
23	SEEMS VERY SENSIBLE TO DO.
24	CHAIRMAN ROTH: SO I WOULD AGREE AND SAY
25	THAT SOME OF THESE THINGS WE'RE GETTING INTO THE
	37

1	SCOPE AND THE SIZE AND WHAT WE MIGHT DO WILL BE
2	DICTATED BY THE RFA, NOT BY THE POLICY. THE POLICY
3	JUST COVERS ONCE YOU HAVE A LOAN COMPONENT, THIS IS
4	WHAT WILL GOVERN THAT PARTICULAR LOAN. SO THE SIZE
5	OF THE LOAN OR DURATION OR OTHER THINGS WILL BE
6	DECIDED, I THINK, IN TERMS OF THE RFA PROCESS
7	ITSELF.
8	DR. LOVE: DUANE, I WOULD AGREE, BUT I DO
9	THINK WE PROBABLY ARE GOING TO HAVE TO FIGURE OUT
10	KIND OF IN TOTAL HOW BIG THIS BASKET IS IN TERMS OF
11	THE OVERALL BUDGET. AND I THINK IF WE THINK ABOUT
12	THAT, WE'RE PROBABLY GOING TO HAVE TO MAKE SOME
13	CONSIDERATIONS OF WHAT IS KIND OF THE TYPICAL
14	GRANT, WHAT TYPICAL LOAN SIZE. AND AT LEAST FOR MY
15	WAY OF THINKING FOR A PROOF OF CONCEPT-TYPE STUDY,
16	I WOULD THINK YOU'D BE TALKING ABOUT \$10 MILLION OR
17	LESS FOR DOING THAT KIND OF STUDY. BUT
18	MR. GOLDBERG: I THINK WE WOULD HAVE
19	HYPOTHETICALLY A HIGHER FAILURE RATE FOR SMALLER
20	LOANS, AND WE WOULD REQUIRE A HIGHER STANDARD OF
21	DATA VERIFICATION HYPOTHESIS FOR LARGER LOANS, AND
22	PRESUMABLY SHOULD HAVE A LOWER FAILURE RATE.
23	MR. KLEIN: THIS IS BOB. I WOULD AGREE
24	WITH WHAT MICHAEL JUST SAID. IF SOMEBODY HAS
25	ALREADY GOT 50 OR \$100 MILLION INTO SOMETHING, AND

38

1	IF THEY HAVE BEEN THROUGH VERY SUBSTANTIAL
2	PRECLINICAL STUDIES, WE COULD POTENTIALLY HAVE, IN
3	FACT, A MORE SECURE PROGRAM. AND REMEMBER, IF
4	WE'RE MISSION-DIRECTED HERE, WE KNOW THAT THERE'S A
5	NUMBER OF CLINICAL TRIALS OUT THERE THAT ARE AT THE
6	FDA OR ALMOST AT THE FDA OR WORKING WITH THE FDA ON
7	PRECLINICAL, AND THEY'RE GOING TO HIT AN IRON WALL
8	IN THIS AREA UNLESS THERE'S MONEY AVAILABLE FOR
9	THESE CLINICAL TRIALS.
10	SO WE'RE GOING TO HAVE THE COLD REALITY
11	OF LOOKING AT THESE, SIZING THEM, SEE HOW MUCH
12	MONEY HAS BEEN PUT AT RISK, MAKING SURE WE HAVE
13	REALLY HIGH QUALITY SCIENTIFIC REVIEWS, BUT ALSO
14	HAVE A LOT OF OTHER PEOPLE'S MONEY AT STAKE BEFORE
15	WE EVER PUT A DOLLAR OUT.
16	CHAIRMAN ROTH: WELL, THE OTHER SIDE OF
17	THAT SPECTRUM, WHICH I'VE ARGUED, IS WE ALSO ARE
18	GOING TO HAVE BRAND-NEW START-UP COMPANIES WHO ARE
10	THE VERY FARLY STACES AND THE SCIENCE IS VERY

19 IN THE VERY EARLY STAGES AND THE SCIENCE IS VERY
20 PROMISING. AND SO WE CAN HAVE SOMETHING, I THINK,
21 THAT GOES THE GAMUT, BUT NOT PENALIZE AT EITHER END
22 OF IT AND MAKE SURE THAT WE INCLUDE EVERYBODY IN
23 THIS.
24 I'D LIKE TO REALLY WRAP THIS PART UP
25 UNLESS THERE'S SOME ADDITIONAL THOUGHTS, AND I'M

39

1	GOING TO ASK FOR SOME PUBLIC COMMENT FOR
2	PRICEWATERHOUSE. BUT I THINK, CHRIS, YOU'VE GOT A
3	COUPLE OF THINGS WE'D LIKE A LITTLE MORE DETAIL ON,
4	AND THEN THE EXPLORATION OF THESE TWO BANKING, ONE
5	IS BANKING, ONE IS MORE VENTURE DEBT JUST WITHOUT
6	THE BANK BEING INVOLVED DIRECTLY.
7	SO ARE THERE PUBLIC COMMENTS HERE IN THE
8	AUDIENCE? ANYBODY LIKE TO MAKE A COMMENT?
9	DR. TROUNSON: IT'S ALAN TROUNSON HERE.
10	I THINK I'M A LITTLE CONCERNED THAT WE ARE VERY
11	FOCUSED ON THE PRE-SEED OR EARLY SEED FUNDS FROM
12	THE EXAMPLES THAT HAVE COME FORWARD. AND THE FACT
13	THAT THE TRANSITION IN THIS WHOLE FIELD IS MOVING
14	MUCH MORE QUICKLY, I THINK, IN TERMS OF SCIENCE
15	TOWARDS A CLINICAL TRIAL COMPONENT, AND I'D BE VERY
16	SURPRISED IF A NUMBER OF COMPANIES WHO ARE GETTING
17	VERY CLOSE TO THAT WILL NEED SOME SUPPORT TO MAKE
18	IT THROUGH THE PHASE. SO IT WOULD BE REALLY GOOD
19	IF THERE WAS SOME EXAMPLES THAT EXPLORED THAT END
20	OF THE COMPONENT BECAUSE I THINK WE'LL BE FACED
21	WITH THAT REASONABLY SOON OR MUCH SOONER THAN WE
22	WOULD HAVE EXPECTED, I THINK, PROBABLY IN STARTING
23	THIS TASK FORCE. AND THAT WILL IMPACT DIRECTLY ON
24	THE CIRM AT SOME POINT FAIRLY SOON.
25	SO, CHRIS, YOU SAID THERE WAS PROGRAMS IN

40

1	SWEDEN, BUT ARE THERE ANY PROGRAMS FROM, FOR
2	EXAMPLE, THE UK OR OTHERS THAT MIGHT FIT BETTER
3	THIS END OF THE SPECTRUM? OR ARE WE KIND OF
4	LIMITED TO THE EXAMPLES OF THE BANK AND INVESTMENT
5	BANKS AND
6	MR. WASDEN: WE LOOKED AT PROGRAMS IN THE
7	UK, IN SWEDEN, IN FRANCE, AND I THOUGHT ONE OR TWO
8	OTHER COUNTRIES. I'VE GOT ANOTHER SLIDE THAT WE
9	COULD SHARE WITH YOU AT SOME OTHER TIME THAT GOES
10	THROUGH THE OTHER EUROPEAN PROGRAMS. BY AND LARGE,
11	THEY WERE NOT THAT DISSIMILAR FROM WHAT WE'VE SEEN
12	IN THE U.S. IT'S NOT AS THOUGH THESE OTHER
13	COUNTRIES HAVE PROGRAMS THAT WERE MUCH LARGER AND
14	MUCH MORE SOPHISTICATED. THEY LOOKED VERY MUCH
15	LIKE WHAT YOU SAW IN THESE STATE PROGRAMS HERE IN
16	THE UNITED STATES.
17	AGAIN, THE FOCUS IS, AND I THINK THIS IS
18	VERY IMPORTANT BECAUSE WE CONTINUALLY TALK ABOUT
19	STAGE II, STAGE III CLINICAL TRIALS, BUT THE FOCUS
20	OF NEARLY EVERY ONE OF THESE PROGRAMS IS REALLY ON
21	PRECLINICAL PHASE I LEVELS OF FUNDING BECAUSE I
22	THINK THE GENERAL VIEW AMONG THE PEOPLE THAT WE
23	SURVEYED WAS THAT IF YOU CAN GET THROUGH YOUR PHASE
24	I SUCCESSFULLY, THEN THE VENTURE COMMUNITY EXISTS
25	FOR ADDITIONAL FUNDING. AND YOU CAN GET YOUR
	41

1	SERIES A AND YOU CAN GET SILICON VALLEY BANK AND
2	YOU CAN GET ALL THESE OTHERS, BUT THE CHALLENGE IS
3	TRANSLATING IT FROM THE UNIVERSITY TO A BUSINESS
4	AND GETTING INTO YOUR PHASE I.
5	CHAIRMAN ROTH: THANKS. I THINK, AGAIN,
6	WE HAVE TO BE OPPORTUNISTIC BECAUSE I CAN ALSO TELL
7	YOU IF YOU'RE IN THE GENE THERAPY FIELD TODAY,
8	GETTING LATE STAGE CLINICAL TRIALS FUNDED IS NEARLY
9	IMPOSSIBLE. BUT I THINK THIS POLICY IS GOING TO
10	GOVERN WHAT CIRM AND THE ICOC DETERMINE IS THE
11	FUNDING GAP. AND THAT CAN MOVE CONSTANTLY. RIGHT
12	NOW I THINK IT'S FAIRLY WIDE, AND I THINK THE
13	CHANCE TO HAVE AN RFA THAT COVERS FROM PRECLINICAL
14	TO PHASE II-A COULD BE FEASIBLE. AND THE SUMS AND
15	THE MILESTONES WOULD BE ACCORDING. A COMPANY THAT
16	ONLY NEEDS II-A MONEY MAY ASK FOR \$7 MILLION TO
17	FUND A II-A STUDY AND THAT'S IT. ANOTHER COMPANY
18	MAY ASK FOR \$7 MILLION, A MILLION FOR PRECLINICAL,
19	A MILLION FOR PHASE I OR I-B, OR THEN FIVE MILLION
20	FOR II-A, SOMETHING LIKE THAT, SO THAT WE CAN GET A
21	BROAD BASE OF IDEAS FROM WHICH TO SELECT WHICH ONES
22	TO FUND.
23	MR. KLEIN: I THINK THAT YOU'RE
24	ABSOLUTELY CORRECT. WHILE THESE OTHER STATES ARE
25	NOT IN STEM CELL RESEARCH, AT PHASE II THEY'VE GOT
	42

1	SOME MONEY AVAILABLE, BUT IN STEM CELL RESEARCH, WE
2	GOT TO REMEMBER THIS IS LIKE THE EARLY STAGES OF
3	RECOMBINANT DNA. THERE WAS NO MONEY, JUST NO MONEY
4	IN THIS AREA.
5	AND SO I THINK THAT DUANE IS ABSOLUTELY
6	RIGHT. WE'VE GOT TO LOOK AT GOING THROUGH THE
7	EARLY PARTS OF PHASE II WITH THIS FUNDING. AND
8	WE'VE GOT TO REALIZE THAT IF WE CAN TAKE COMPANIES
9	THAT, WHILE HAVING AN IMPORTANT PART OF THIS
10	PROGRAM FOR COMPANIES THAT ARE IN START-UPS WITH
11	GREAT SCIENTIFIC IDEA AND THEY'RE IN THE
12	PRECLINICAL PHASE, IF WE CAN TAKE COMPANIES THAT
13	PUT A LOT OF MONEY INTO EARLY PRECLINICAL, HAVE A
14	LOT OF MATCHING FUNDS UP FRONT TO PUT UP, IF WE CAN
15	HAVE A COMPANY WITH A BREAKTHROUGH, IT'S GOING TO
16	BRING LOTS OF CAPITAL INTO THIS FIELD.
17	A SINGLE BREAKTHROUGH IS PROBABLY NOT
18	GOING TO DO IT, BUT IT'S THE FIRST ONE, TWO, OR
19	THREE COMPANIES THAT REALLY GET THROUGH PHASE II
20	THAT ARE GOING TO BRING SIGNIFICANT NEW CAPITAL IN
21	THIS FIELD. AND WE'RE GOING TO NEED TO GET THROUGH
22	THAT BARRIER AND HELP THOSE COMPANIES WHO HAVE VERY
23	SUBSTANTIAL INVESTMENTS, BUT CAN'T ACCESS THE MONEY
24	TO REALLY GET THROUGH THAT FIELD WITHOUT SOME HELP
25	THAT WILL OPEN THE WHOLE FIELD TO NEW CAPITAL
	43

1 INFLOWS. 2 CHAIRMAN ROTH: ANY FINAL COMMENTS? ONE 3 FROM THE PUBLIC, JOHN. MR. SIMPSON: JOHN SIMPSON WITH THE 4 5 FOUNDATION FOR TAXPAYER AND CONSUMER RIGHTS. 6 LOOKING AT THIS, IT STRIKES ME THAT THERE REALLY AREN'T COMPARABLES OUT THERE. AND IT'S GOING TO 7 8 COME BACK TO THE BOARD TO, I THINK, AS DR. LOVE 9 SUGGESTED, FIGURE OUT HOW MUCH YOU WANT TO PUT INTO 10 THE PROGRAM, FIGURE OUT YOUR OWN CRITERIA, AND 11 THERE'S NOT A LOT TO BE LEARNED ELSEWHERE. IT MAY 12 BE A REFLECTION, ONCE AGAIN, OF THE FACT THAT 13 CALIFORNIA IS LEADING THE WAY IN ALL OF THIS, WHICH 14 STRIKES ME AS THAT'S SOMETIMES RISKY, BUT THAT JUST 15 IS WHERE WE ARE. 16 THE OTHER QUESTION I WOULD ASK, I DIDN'T 17 SEE ANY COMPARABLES HERE FROM FOUNDATIONS THAT I THINK SOMETIMES HAVE LOAN PROGRAMS. I DON'T KNOW 18 19 IF THERE'S ANYTHING TO BE LEARNED THERE OR NOT, BUT 20 IT MAY BE THAT THERE'S NOT A LOT TO BE GLEANED BY 21 THESE COMPARABLES. 22 CHAIRMAN ROTH: SO, CHRIS --23 MR. WASDEN: WE DID LOOK AT SOME 24 FOUNDATIONS AS WELL AS -- SO WE LOOKED AT 25 FOUNDATIONS, SO WE LOOKED AT THINGS LIKE THE CANCER 44

1	FOUNDATION AND THE HEART ASSOCIATION AND THINGS
2	LIKE THAT. AND WHAT WE FOUND IS THAT THEIR
3	PROGRAMS ARE SMALLER THAN THE ONES WE JUST SHOWED
4	YOU AND ARE LESS SOPHISTICATED THAN WHAT THE STATES
5	ARE DOING.
6	MR. KLEIN: I THINK FOLLOWING JOHN
7	SIMPSON'S SUGGESTION, JDRF, THAT I'M ALSO ON THE
8	BOARD OF, HAS ABOUT 25 COMPANIES IN SOME PHASE OF
9	CO-FUNDING. BUT I ALSO FOUND IT OF GREAT INTEREST,
10	CHRIS, THAT WITH UTAH HAVING NO CONTROLS OVER WHERE
11	THE MONEY GOES AND WHETHER IT EVEN STAYS IN THE
12	STATE, I THINK IT'S A VERY SERIOUS JOB FOR JOHN
13	SIMPSON TO LOOK INTO.
14	CHAIRMAN ROTH: OKAY. IF THERE ARE ANY
15	OTHER MARCY, ANYBODY ELSE LIKE TO MAKE A COMMENT
16	OR ASK A QUESTION BEFORE WE MOVE ON?
17	MS. FEIT: NO. JUST I AGREE WITH
18	EVERYBODY ABOUT THE COMMENTS REGARDING DIVIDING THE
19	PORTFOLIO THAT CALIFORNIA HAS TO GO FORWARD INTO
20	DIFFERENT SECTIONS SO THAT WE CAN CAREFULLY
21	EVALUATE WHAT WE'RE GOING TO FUND.
22	I ALSO JUST WANTED TO COMMENT THAT I
23	REALLY AM INTERESTED IN THE MATCHING SITUATION AND
24	ALSO THE POSSIBILITY THAT THERE COULD BE DRAWS ON
25	THE LOANS SO THAT THE MONEY ISN'T AT RISK ALL AT
	45

1	ONCE	
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2 MR. WASDEN: NEARLY ALL THE PROGRAMS HAD 3 THAT OTHER ELEMENT YOU JUST MENTIONED WITH THE 4 DRAWS. SO THEY WOULD HAVE DRAW-DOWNS. GENERALLY 5 HALF OF IT WAS UPON RECEIPT OR APPROVAL, AND THEN 6 THE OTHER MONEY WOULD EITHER BE SIX MONTHS OR 12 7 MONTHS LATER, AND GENERALLY BASED UPON SOME 8 MILESTONES, BUT MOST OF THE PROGRAMS, ALL THE MONEY 9 WAS DISBURSED WITHIN 18 MONTHS. 10 CHAIRMAN ROTH: OKAY. 11 MR. KLEIN: JUST TO FOLLOW ON WITH THAT, 12 WITH LARGER AMOUNTS, WE'RE GOING TO NEED A LOT OF 13 FINITE MILESTONES THAT ARE PERFORMANCE DRIVEN. I 14 MEAN WE'RE GOING TO HAVE TO HAVE SOME CONTROLS ON 15 PERFORMANCE BECAUSE WE'RE NOT GOING TO PUT OUT A 16 LARGE AMOUNT OF MONEY, AT LEAST IT'S HARD FOR ME TO 17 CONCEIVE, WITHOUT REALLY BREAKING IT DOWN INTO 18 MILESTONES AS WE WALK THROUGH EACH SUBPHASE OF THIS

19 AND SEE THAT WE'RE GETTING PERFORMANCE ALL THE WAY20 THROUGH IT.

21 MR. WASDEN: THE WAY THAT STATES DEALT 22 WITH THAT THAT WE'VE OBSERVED IS THAT THEY ALLOWED 23 YOU TO APPLY MULTIPLE TIMES. SO THEY WOULD HAVE A 24 DRAW-DOWN SCHEDULE FOR EACH LOAN; BUT AFTER YOU'VE 25 EXHAUSTED THAT, THEN YOU WOULD COME BACK AND APPLY

46

1	AGAIN. OBVIOUSLY THEY WOULD ALREADY KNOW WHO YOU
2	ARE. RATHER THAN MAKE A LARGE UP-FRONT COMMITMENT
3	THAT WOULD DRAW DOWN OVER MULTIPLE YEARS, THEY JUST
4	PREFERRED TO HAVE YOU REAPPLY TO THEIR PROGRAM.
5	MR. KLEIN: IT MAY BE DIFFICULT TO GET
6	YOUR MATCHING FUND COMMITMENTS IF YOU DON'T HAVE A
7	LONGER TERM COMMITMENT WITH MULTIPLE MILESTONES
8	BECAUSE IF YOU BREAK IT UP AND YOUR MATCHING FUND
9	SOURCE CAN'T SEE YOU'RE GOING TO GET TO THE END
10	GAME, WHY ARE THEY GOING TO PUT THEIR MONEY UP? SO
11	I THINK WE'RE GOING TO HAVE TO LOOK AT
12	MULTIPLE-YEAR COMMITMENTS AND TRY AND VALIDATE IT
13	BY LOOKING AT THE BANKING VENTURE AND THE VENTURE
14	FUND INDUSTRY BECAUSE IT'S GOING TO INDUCE MORE
15	LEVERAGE.
16	AND AS LONG AS IT'S PERFORMANCE DRIVEN
17	AND THEY CAN'T GET THE MONEY UNLESS THEY PERFORM
18	AND WE'RE PROTECTED AND THE PATIENTS ARE PROTECTED,
19	THE RESEARCH IS PROTECTED, I'D ASK THE QUESTION WHY
20	DON'T WE LOOK AT THAT OPTION.
21	CHAIRMAN ROTH: OKAY. WHAT I'D LIKE TO
22	DO NOW IS CHRIS, THANK YOU FOR THE PRELIMINARY
23	WORK, AND WE LOOK FORWARD TO GETTING BACK TOGETHER
24	AND TALKING ABOUT HOW WE GET AT THIS ADDITIONAL
25	INFORMATION WE'D LIKE TO SEE.
	47

1	AND THEN FINAL THING THAT WE NEED TO GET
2	TO CHRIS AT SOME POINT IS THE PORTFOLIO, THE WAY WE
3	BREAK THE PORTFOLIO OUT, AND LOOK AT A POSSIBLE
4	RETURN ON INVESTMENT, SO SOME BUDGETING THAT GOES
5	INTO THAT. SO THANKS, CHRIS.
6	I'M GOING TO CHANGE GEARS NOW AND GO TO
7	THE ICOC LOAN TASK FORCE DRAFT POLICY COMPONENTS.
8	DOES EVERYBODY HAVE A COPY OF THAT ON THE PHONE?
9	MR. GOLDBERG: YES.
10	CHAIRMAN ROTH: I'M GOING TO CALL ON JOHN
11	HALE AND SCOTT TOCHER AND LYNN HARWELL, WHO HAVE
12	BEEN HELPING US HERE, TO HELP ME WALK YOU THROUGH
13	SOME OF THE THOUGHTS BEHIND THIS. I'M GOING TO DO
14	IT IN GENERALITIES, AND THEN I WANT TO ZERO IN ON
15	THE WORK THAT I HOPE WE CAN GET TO TODAY, WHICH IS
16	REALLY START TALKING ABOUT SOME POSSIBLE
17	DEFINITIONS IN TERMS OF THE TERM OF THE LOANS, THE
18	INTEREST RATES, THINGS LIKE THAT, AND FIND OUT IF
19	THERE'S ADDITIONAL WORK WE NEED. PARTICULARLY I
20	WANT TO FOCUS TODAY ON THE WARRANTS, AND THAT'S WHY
21	JOHN HALE IS HERE, AND HE'LL TALK TO US.
22	SO THE PREAMBLE, WE'VE BEEN WORKING ON
23	THIS. WE'D APPRECIATE ANY COMMENTS YOU MAY HAVE ON
24	IT, IF YOU GET A CHANCE TO READ IT, TO MAKE SURE
25	THAT IT, IN FACT, TALKS ABOUT WHAT THE PURPOSE OF
	48

1	THESE LOANS IS ALL ABOUT, IN PARTICULAR PRODUCT
2	ADVANCEMENT, PRODUCT DEVELOPMENT. SO UNLESS
3	SOMEBODY HAS SOME BURNING COMMENTS ON THAT, I'LL
4	SKIP TO PAGE 2. ANYONE ON PAGE 1?
5	ON PAGE 2, WE TALK ABOUT A FOUR-PHASE
6	EVALUATION PRIOR TO FUNDING AND PRIOR TO A
7	SCIENTIFIC MERIT EVALUATION BY THE GRANTS WORKING
8	GROUP. JUST TO REMIND WHY WE WANT TO DO THIS
9	FOUR-PHASE EVALUATION BEFORE WE ASK THE GRANTS
10	WORKING GROUP TO GET INVOLVED IS WE DO NOT WANT TO
11	SEND THEM IDEAS THAT DO NOT PASS THE SORT OF
12	GO/NO-GO TEST, IS THIS REAL AS A BUSINESS
13	PROPOSITION.
14	AND THAT'S GOING TO BE MEASURED IN FOUR
15	WAYS: A BACKGROUND CHECK ON THE PRINCIPALS; A
16	CREDIT EVALUATION ON THE, QUOTE, COMPANY JUST TO
17	MAKE SURE THERE ISN'T A LARGE AMOUNT OF TRADE DEBT
18	OR SOME OTHER KIND OF UNUSUAL DEBT THAT THIS LOAN
19	MAY END UP PAYING FOR; THREE, ANY SIGNIFICANT
20	LITIGATION AGAINST THE PRINCIPALS AND/OR THE
21	COMPANY; AND, FOUR, AND PROBABLY MOST IMPORTANT
22	HERE, IS THE BUSINESS PLAN FINANCIAL FEASIBILITY
23	STUDY. THIS IS ABOUT HAVING A LOOK AT WHETHER THIS
24	IDEA, IN FACT, HOLDS TOGETHER. AND THE THOUGHT
25	PROCESS THAT THE APPLICANT WENT THROUGH TO TALK
	49

1	ABOUT HOW THEY'RE GOING TO GET THE FOLLOW-ON
2	FUNDING AFTER OUR LOAN HAS BEEN EXHAUSTED.
3	AND THOSE ARE THE FOUR THAT WE CAME UP
4	WITH. WE'VE ADDED A LOT MORE TO ITEM NO. 4. AND I
5	WOULD BE INTERESTED, IF YOU HAVE A CHANCE TO GO
6	THROUGH THAT, TO GIVE US ANY COMMENTS YOU MAY HAVE
7	ON THAT BUSINESS ASSESSMENT.
8	WHILE YOU'RE LOOKING, MY THOUGHT ON THIS
9	IS HERE'S WHERE WE COULD USE SOME OUTSIDE
10	CONSULTANTS AND EXPERTS. I'M NOT AT ALL SURE
11	THAT'S INVESTMENT BANKS OR NECESSARILY BANKERS, BUT
12	I THINK IT MORE COMES IN THE CREDIBILITY OF THE
13	PEOPLE THAT SORT OF LOOK AT THIS AS THEY MIGHT AS A
14	VENTURE CAPITALIST MIGHT LOOK AT IT AND SAY DOES
15	THIS HANG TOGETHER. SO FINDING THOSE KIND OF
16	PEOPLE.
17	MY OWN INVOLVEMENT IN SAN DIEGO IN
18	ADDITION TO THE COMPANY IS TO DO THIS EVERY DAY FOR
19	PEOPLE. AND SO THERE ARE A NUMBER OF THESE TYPES
20	OF ORGANIZATIONS LIKE CONNECT AND OTHERS THAT HAVE
21	VOLUNTEERS WHO COME IN AND ACTUALLY LOOK AT THESE
22	KIND OF THINGS AND ASK SOME QUESTIONS AND GET A
23	PRETTY GOOD HANDLE ON IT.
24	I THINK WHAT WE'RE LOOKING FOR HERE IS IS
25	THERE A CREDIBLE PLAN HERE, OR IS THIS SOMETHING
	50

1	THAT WE SHOULDN'T WASTE THE REVIEWERS' TIME EVEN
2	SENDING IT TO THEM?
3	MR. KLEIN: SO, DUANE, MY SUGGESTION IS
4	THAT, GIVEN THE LIMITATIONS ON CIRM STAFF AND GIVEN
5	THIS IS NOT A SPECIALTY WE CAN INTERNALIZE EASILY,
6	WHETHER IT'S A NONPROFIT DELEGATED UNDERWRITER OR A
7	FOR-PROFIT DELEGATED UNDERWRITER, WHETHER IT'S A
8	FUND UNDER CONTRACT OR WHETHER IT'S A VENTURE BANK
9	OR WHETHER IT'S A NONPROFIT BUSINESS CONSULTING
10	SERVICE THAT HAS A TRACK RECORD IN THIS AREA, I'D
11	SUGGEST THAT WE LOOK AT THE CONCEPT OF DELEGATED
12	UNDERWRITER SUPPORT REVIEWED BY CIRM STAFF. SO THE
13	PRIMARY MANPOWER NEED IS EXTERNALIZED AND THERE ARE
14	MANAGEMENT REPORTS THAT OUR STAFF REVIEW, SO WE
15	MINIMIZE THE INTERNAL STAFF, WHICH WE NEED TO FOCUS
16	IN THE SCIENTIFIC AREA.
17	CHAIRMAN ROTH: OTHER COMMENTS? ONE
18	THING, MARCY, ON THIS IN THE LAST SENTENCE, WE PUT
19	MILESTONE PAYMENTS MAY BE CONDITIONED ON SECURING
20	NECESSARY GAP FUNDING. PART OF THE ASSESSMENT
21	WOULD BE THAT WE THINK THEY'VE UNDERESTIMATED
22	APPRECIABLY THE AMOUNT OF MONEY IT'S GOING TO TAKE
23	TO MOVE FROM HERE TO THERE, AND WE MAKE THAT
24	CONDITION A MILESTONE. SO PART OF WHAT WE'D ASK,
25	AS BOB SUGGESTS, AN OUTSIDE REVIEWER OR REVIEWERS
	51

1	TO DO IS TO TELL US IF THESE MILESTONES ARE REAL.
2	MS. FEIT: I THINK WHILE THAT PROBABLY
3	WILL REQUIRE A LOT OF WORK, I THINK IT'S IMPORTANT
4	IN TERMS OF OUR RESPONSIBILITY TOWARD THE FUNDING.
5	CHAIRMAN ROTH: DO ALL THE COMMITTEE
6	MEMBERS SHARE THE VIEW THAT WE SHOULD DO THIS FIRST
7	BEFORE WE ASK THE SCIENTIFIC GROUP TO GO TO THE
8	TROUBLE OF TRYING TO EVALUATE THE SCIENTIFIC MERITS
9	OF IT?
10	MR. GOLDBERG: YES.
11	DR. LOVE: YES.
12	CHAIRMAN ROTH: I THINK THERE'S GENERAL
13	CONSENSUS FOR THAT.
14	OKAY. IF WE COULD MOVE, THEN, PERHAPS TO
15	PAGE 3. AND PLEASE INTERRUPT ME ON THE PHONE IF
16	YOU HAVE ANY ADDITIONAL THOUGHTS AS WE GO THROUGH
17	THIS.
18	SO THREE DEALS WITH THE LOAN MILESTONES
19	IN PART B, AND WE'VE HAD SUGGESTIONS ABOUT THAT. I
20	THINK THERE'S WIDESPREAD AGREEMENT THAT THESE LOANS
21	ARE GOING TO BE MADE WITH FUNDING MILESTONES,
22	HOPEFULLY EASILY IDENTIFIED, EASY TO MEASURE, AND
23	NOT VERY SUBJECTIVE. THEY'RE PRETTY OBJECTIVE,
24	LIKE FDA APPROVAL TO BEGIN A CLINICAL TRIAL OR
25	COMMENCEMENT OF PHASE I OR SOMETHING LIKE THAT THAT
	52

1	YOU CAN ACTUALLY MEASURE AND NOT HAVE TO GUESS
2	WHETHER OR NOT IT WAS MET.
3	TERMS OF THE DEBT, AND HERE'S WHERE I
4	WANT TO SPEND THE BULK OF OUR TIME REMAINING TODAY
5	JUST GOING THROUGH AND TALKING ABOUT THINGS THAT WE
6	THINK WE NEED ADDITIONAL WORK ON OR ADDITIONAL
7	CONTENT BEFORE WE'RE ABLE TO ACTUALLY PEN A
8	POTENTIAL FINAL DRAFT TO GO TO ICOC FOR THEIR
9	REVIEW.
10	AND BEFORE I DO THAT, I WANT TO INTRODUCE
11	AGAIN JOHN HALE AND TALK ABOUT FIRST, WE HAVE
12	THE BUSINESS OF THE TERM. AND I THINK WHAT WE
13	HEARD FROM CHRIS IS THAT MANY OF THE SMALLER
14	PROGRAMS EARLIER STAGE ARE SHORTER TERM, BUT AT THE
15	OTHER END, THEY'RE LONGER TERM. AND RECALLING OUR
16	CONVERSATION THAT WE HAD WITH THE VENTURE
17	PROVIDERS, THE VENTURE-BACKED BANKS AND OTHERS, I
18	THINK THEY WERE UNCOMFORTABLE WITH THE FIVE- TO
19	SEVEN-YEAR TERM AND SUGGESTED THAT WE CONSIDER A
20	TEN-YEAR TERM WITH EARLY PAYMENT CLAUSES. AND
21	THERE WERE THREE THAT WERE GENERALLY DISCUSSED.
22	ONE WOULD BE A CHANGE OF CONTROL. THE
23	IDEA IS SOLD, THERE'S A NEW OWNER, AND THAT WOULD
24	CAUSE THE LOAN TO BECOME DUE WITHIN A PERIOD OF
25	TIME. AND WE HAVEN'T DEFINED MUCH MORE THAN THAT,
	53

1	BUT I THINK MICHAEL AND OTHERS HAD SOME THOUGHTS ON
2	CHANGE OF CONTROL AS BEING A FAIRLY EASY DEFINITION
3	TO COME UP WITH.
4	THE SECOND ONE WAS ONE THAT WOULD BE SOME
5	MULTIPLE OF THE FINANCING IN TERMS OF THE LOAN
6	SIZE. IF WE GAVE A MILLION-DOLLAR LOAN, PERHAPS
7	WHEN THEY HAD AN ADDITIONAL 20 MILLION, THAT THE
8	LOAN WOULD BECOME DUE, OR POTENTIALLY THE PREMIUM
9	WOULD GO UP. IT WOULD COST YOU MORE TO HOLD THAT
10	LOAN IF YOU DIDN'T REPAY IT. IF IT WASN'T DUE AT
11	TEN YEARS, IT WAS THE SEVEN YEARS, YOU'VE NOW
12	RAISED \$20 MILLION ON TOP OF THE MILLION WE GAVE.
13	YOU COULD EITHER PAY IT BACK OR PAY AN ADDITIONAL
14	PREMIUM. SO SOMETHING LIKE THAT, THAT WOULD BE
15	BASED ON THE TOTAL AMOUNT YOU HAVE.
16	THE FINAL ONE IS PROGRESSION TOWARDS
17	COMMERCIALIZATION. MY THOUGHT WOULD BE THAT ON A
18	THERAPEUTIC, WITHIN SIX MONTHS OF ENTERING A
19	PIVOTAL CLINICAL TRIAL, THE LOAN WOULD BE DUE. SO
20	THAT WE CAN RECYCLE THAT MONEY INSTEAD OF WAITING,
21	OR THERE WOULD BE A LOAN PREMIUM ADDED THERE
22	POTENTIALLY. OR IF IT'S A MEDICAL DEVICE, WHEN
23	THEY FILE A 510K WITH THE FDA OR A PREMARKET
24	APPROVAL WITH THE FDA, OR IF IT'S A RESEARCH TOOL,
25	WHEN THEY FILE WITH THE FDA. SO THAT WE WOULD
	54

1	THEN THAT WOULD ACCELERATE THE PAYMENT. IT'S
2	SUCCESSFUL IN BOTH CASES, ALL THREE CASES, SO WE
3	WOULD LIKE NOW TO BE REPAID.
4	SO THOSE ARE THREE THOUGHTS THAT WE'VE
5	PICKED UP IN THE VARIOUS MEETINGS WE'VE HELD WITH
6	THE CONSTITUENTS THAT I THINK WE COULD CONSIDER
7	WITH A LONGER LOAN TERM AND THESE EARLY REPAYMENT
8	CONDITIONS. SO I'M GOING TO STOP THERE AND SEE IF
9	THERE'S OTHER THOUGHTS OR IDEAS.
10	MR. KLEIN: DUANE, COULD YOU DEFINE FOR
11	EVERYONE YOUR VIEW OF A PIVOTAL CLINICAL TRIAL?
12	CHAIRMAN ROTH: A PIVOTAL CLINICAL TRIAL
13	WOULD GENERALLY BE A PHASE II-B OR PHASE III STUDY
14	WHERE YOU'VE GOT STATISTICAL OUTCOMES HERE IN A
15	BLINDED TRIAL, SOMETHING THAT IS TRULY A TEST THAT
16	THIS IS REAL. AND I'M SORT OF OPEN TO WHETHER YOU
17	MAKE THAT II-B BECAUSE SOMETIMES II-B TRIALS
18	ACTUALLY, IF SUCCESSFUL, CAN BE SUBMITTED FOR FDA
19	APPROVAL OR WHETHER IT'S PHASE III. BUT ONCE
20	YOU'RE IN THAT PHASE, GENERALLY SPEAKING, YOU'RE
21	ABLE TO RAISE FINANCING.
22	AND, AGAIN, I SAY GENERALLY. THAT'S NOT
23	ALWAYS THE CASE. IF IT WERE, I THINK WE COULD
24	ADJUST AT THAT POINT. BUT FOR THE MOST PART, THE
25	COMPANIES WE TALKED TO SAID, LISTEN, IF YOU GIVE US
	55

1	MONEY IN THIS EARLY STAGE AND WE'RE LUCKY ENOUGH TO
2	GET INTO A PIVOTAL TRIAL, WE SHOULD BE ABLE TO
3	RAISE THE MONEY OR WE'RE NOT NECESSARILY DOING OUR
4	JOB. SO WHETHER THAT REMAINS TRUE OR NOT, WE'LL
5	HAVE TO SEE, BUT AT LEAST WE COULD HAVE SOMETHING
6	IN THERE THAT WOULD TRIGGER A REVIEW. OTHERWISE, I
7	THINK WE'D HAVE TO SETTLE ON A SHORTER TERM. AND
8	SO THAT WOULD BE THE COMPROMISE, A LONGER TERM, BUT
9	EARLY REPAYMENT IDEAS.
10	THOUGHT OR COMMENTS?
11	DR. BLOOM: SOMETIMES WHETHER A TRIAL IS
12	PIVOTAL OR NOT IS DETERMINED BY NEGOTIATION WHEN
13	YOU PROPOSE THE PLAN.
14	CHAIRMAN ROTH: THAT WOULD BE MY
15	DEFINITION. IF YOU GO TO THE FDA AND YOU SAY THIS
16	IS A PIVOTAL TRIAL, IN MOST CASES IT'S PHASE III,
17	BUT OCCASIONALLY IT CAN BE. ESPECIALLY FOR THESE
18	KINDS OF THERAPIES WHERE THERE'S REALLY A SEVERE
19	PATIENT NEED, YOU MAY BE ABLE TO DO IT.
20	MR. KLEIN: JUST AS AN ADDITIONAL POINT,
21	THEORETICALLY AT LEAST, AS THIS AREA MATURES, NOT
22	NOW, BUT AS THE AREA MATURES, WE COULD BE IN A
23	POSITION WHERE THEY'RE IN PHASE II-A, THEY HAVE
24	GOOD RESULTS, THEY'RE RAISING MONEY FOR PHASE II-B,
25	AND WE HAVE AN ABILITY TO SELL THE LOAN AND THE
	56

1	WARRANTS, MAYBE WE SELL THE LOAN AT 90 CENTS ON THE
2	DOLLAR, BUT THROUGH THE WARRANTS WE GET BACK ENOUGH
3	TO OFFSET THE DISCOUNT AND ARE ABLE TO ROLL THE
4	MONEY FORWARD.
5	OUR MISSION IS TO GET CLINICAL TRIALS TO
6	PATIENTS, AND THERE COULD BE AN OPPORTUNITY
7	ESSENTIALLY TO FACTOR THESE LOANS OUT AS THIS FIELD
8	BECOMES MORE MATURE AND WE'RE DOWNSTREAM IN THIS
9	PROCESS WITHOUT CREATING A LIQUIDITY EVENT FOR THE
10	COMPANY.
11	CHAIRMAN ROTH: OTHER THOUGHTS ON THIS
12	AREA? ARE WE HEADED DOWN THE RIGHT PATH, I GUESS,
13	IS THE QUESTION?
14	I'M GOING TO TAKE SOME PUBLIC COMMENT TOO
15	AS WE GO THROUGH THESE. YOU DON'T HAVE TO HOLD TO
16	THE END. WE CAN HAVE A GENERAL DISCUSSION. ARE
17	THERE ANY PUBLIC COMMENTS?
18	MR. GOLDBERG: QUESTION FROM OUR SITE,
19	DUANE. AND THAT IS, I THINK THERE'S AN ISSUE THAT
20	WE SHOULD ADDRESS ABOUT CONCURRENCY OF THE LOAN
21	TERM RELATIVE TO THE CIRM'S LIFE SPAN. AND I KNOW
22	OUR LIFE SPAN ISN'T FIXED. IT'S REALLY DRIVEN OFF
23	OF THE SPENDING OF THE \$3 BILLION, WHICH MAY TAKE
24	TEN YEARS, MAY TAKE 15 YEARS, BUT IS LIKELY TO BE
25	DONE WITHIN THAT SPAN. I THINK WE SHOULD BE
	57

1	CAUTIOUS THAT WE DON'T FIND OURSELVES IN CALENDAR
2	CREEP HERE WHERE WE'VE GOT OUR FUNDAMENTAL MISSION
3	OF DISPENSING THE \$3 BILLION HAS BEEN PERFORMED AND
4	WE'VE GOT A BUNCH OF IOU'S OUT THERE THAT I
5	DON'T KNOW HOW THAT GETS DEALT WITH.
6	MR. KLEIN: THIS IS BOB, MICHAEL. AS YOU
7	SAY, WE DON'T HAVE A DEFINED TERM. IT'S HOW WE
8	SPEND OUR MONEY. REMEMBER, THE VOTERS APPROVED 6
9	BILLION BECAUSE THEY APPROVED 3 BILLION IN
10	PRINCIPAL AND 3 BILLION IN INTEREST OVER 35 YEARS.
11	SO IF WE HAVE A LOAN PROGRAM AND IT'S REVOLVING AND
12	WE'RE COLLECTING INTEREST BACK, WE MAY OUT IN YEARS
13	7, 8, 9, 10, 11 BE COLLECTING MONEY THAT'S
14	ORIGINATED IN THE LOANS THAT GO OUT TO YEARS 14,
15	15, 16, 17, 18, ETC. BUT I THINK WE HAVE TO MAKE
16	INTELLIGENT DECISIONS ON THESE LOANS. AS THE
17	PORTFOLIO SHRINKS OVER TIME, YOU WILL HAVE A
18	SMALLER STAFF THAT COULD BE SUPPORTED.
19	AND, FRANKLY, THE LEGISLATURE, YOU KNOW,
20	AT SOME POINT OUT HERE IS GOING TO LOOK IN YEAR 10,
21	11, OR 12 AND SEE IF WE PERFORMED AND WHAT OUR
22	RECORD IS GOING TO BE. AND THEY'RE GOING TO MAKE A
23	JUDGMENT ABOUT WHETHER WE SHOULD GO FORWARD,
24	WHETHER THERE SHOULD BE MORE MONEY PUT INTO AREA
25	BECAUSE WE'RE HAVING SOME SUCCESSES, WHETHER WE
	58

1	HAVE TOXICITY TESTS OUT THERE, FOR EXAMPLE, THAT
2	ARE HELPING REDUCE THE COST OF DEVELOPING SMALL
3	MOLECULE THERAPIES AND REDUCING TOXICITY LOSSES IN
4	HUMAN TRIALS BECAUSE WE'VE DONE CELLULAR SCREENS
5	FOR TOXICITY.
6	
	BUT THESE LOANS IN THE OUTER PERIOD COULD
7	BE VERY HELPFUL BECAUSE EVEN THOUGH THEY'RE IN
8	FUTURE DISCOUNTED DOLLARS BECAUSE INFLATION WILL
9	HAVE EATEN AWAY AT THE VALUE OF THE PRINCIPAL, AS
10	THE FIELD MATURES AND THERE'S MORE MATCHING FUNDS
11	AVAILABLE, THEY CAN STILL HELP ACCELERATE THE
12	PROGRAM.
13	CHAIRMAN ROTH: OTHER THOUGHTS OR
14	COMMENTS? ANOTHER FROM THE AUDIENCE.
15	MR. EARP: THIS IS DAVID EARP FROM GERON.
16	COUPLE OF POINTS ON THE ISSUES THAT WE DISCUSSED SO
17	FAR. FIRST OF ALL, GOING BACK TO THE LITIGATION
18	ASSESSMENT, WE SKIPPED OVER THAT FAIRLY QUICKLY,
19	BUT A COUPLE OF WEEKS AGO IN SAN DIEGO, THERE WAS A
20	DETAILED DISCUSSION ABOUT WHETHER THAT WOULD
21	INVOLVE ANY FREEDOM TO OPERATE STUDY IP ISSUES. I
22	THINK THAT, AS YOU EXPLAINED IT, DUANE, YOU SAID
23	THIS IS A LITIGATION ASSESSMENT FOR REVIEWS OF
24	LITIGATION AGAINST THE PRINCIPALS IN THE COMPANY.
25	AND I THINK IF IT'S LIMITED TO THAT, THEN IT'S VERY
	59

1	DISCRETE AND UNDERSTANDABLE AND FINE.
2	THE LANGUAGE AS IT'S WRITTEN HERE READS A
3	LITTLE MORE BROADLY BECAUSE IT TALKS ABOUT
4	LITIGATION THAT MIGHT CREATE AN OBSTACLE TO THE
5	RESEARCH PROJECT, WHICH IS THE RESEARCH PROPOSED,
6	WHICH IS A BROADER POTENTIAL SCOPE OF LITIGATION
7	ASSESSMENT. I THINK IT'S IMPORTANT. IF WE MEAN
8	WHAT YOU WERE READING IT TO MEAN, DUANE, THEN THE
9	LANGUAGE ACTUALLY SHOULD REFLECT THAT.
10	CHAIRMAN ROTH: DAVID, I MEANT WHAT I
11	READ, BUT THAT'S NOT NECESSARILY UNIVERSALLY
12	SUPPORTED. FOR THE TASK FORCE MEMBERS, YOU WILL
13	RECALL WE HAD A LENGTHY CONVERSATION IN SAN DIEGO
14	ABOUT DOING AN IP ASSESSMENT. AND I THINK THE
15	CONCLUSION AFTER HEARING FROM PEOPLE THAT HAVE BEEN
16	THROUGH THIS IS THAT WOULD REALLY BE ALMOST
17	IMPOSSIBLE AND WOULD CERTAINLY BE A BARRIER FOR
18	ANYBODY APPLYING FOR THESE LOANS BECAUSE THEY'RE
19	NOT ABOUT TO REVEAL THEIR WEAKNESSES IN THEIR
20	INTELLECTUAL PROPERTY, SHOULD THEY HAVE ANY, AND
21	THERE'S ISSUES OF ATTORNEY-CLIENT PRIVILEGE WHICH
22	WOULD ENTER IN HERE.
23	SO IN ADDITION TO TALKING WITH VENTURE
24	BANKS, I THINK THEY ALL THOUGHT THAT WE'RE JUST NOT
25	GOING TO BE ABLE TO DO A LOT IN THAT AREA.
	60

1	MR. EARP: SOME OF THAT MAY BE ADDRESSED
2	BY THE NOTION OF REQUIREMENT FOR CO-FUNDING
3	BECAUSE, AS YOU SAID, THAT'S A SANITY CHECK.
4	SOMEBODY ELSE HAS DONE SOME DILIGENCE AND PROVIDED
5	FUNDING.
6	CHAIRMAN ROTH: CERTAINLY, I THINK IF
7	THERE'S BEEN PRIOR MONEY PUT INTO THE COMPANY, YOU
8	KNOW WHO THOSE ARE, THAT WOULD HELP SATISFY. WE
9	SHOULD HEAR FROM THE COMMITTEE ON THIS PARTICULAR
10	ISSUE, WHETHER WE WANT TO DELVE INTO INTELLECTUAL
11	PROPERTY AS PART OF THE CONDITIONS FOR MAKING THESE
12	LOANS.
13	MR. KLEIN: DUANE, THERE'S A COUPLE OF
14	CASES. ONE IS OBVIOUSLY IF THERE'S SOME KIND OF AN
15	INJUNCTION FOR INFRINGEMENT, THAT'S ONE THING, VERY
16	OBVIOUS. BUT I THINK THAT THE COMMENT THAT DAVID
17	JUST MADE IS VERY PERTINENT HERE IS THAT,
18	PARTICULARLY IF THERE'S MATCHING FUNDS GOING
19	FORWARD WITH THIS, SOMEBODY IS PUTTING PRIVATE
20	MONEY AT RISK BASED UPON THEIR DETAILED ANALYSIS
21	THAT THEY CAN IMPLEMENT THE PLAN THAT THEY PUT
22	FORWARD, AND THAT'S A REAL SUBSTANTIAL ASSURANCE TO
23	US THAT THERE IS MONEY ON THE TABLE THAT IS BEING
24	BET ON THE SAME RISK WE'RE BEING ASKED TO TAKE.
25	CHAIRMAN ROTH: DAVID, I'M GOING TO ASK
	61

1 YOU IF YOU	'D LIKE TO COMMENT ON JUST WHAT IS THE
2 CURRENT IP	LAW IN TERMS OF BRINGING A LAWSUIT AND
3 INFRINGEME	NT CASE AGAINST SOMEBODY THAT'S
4 DEVELOPING	A PRODUCT BEFORE THEY TRY TO
5 COMMERCIAL	IZE.
6	MR. EARP: THERE'S A HUGE BODY OF CASE
7 LAW AROUND	THAT, AND IT'S STILL A FAIRLY GRAY AREA.
8 BUT GENERA	LLY, OF COURSE, THERE'S THE HATCH-WAXMAN
9 EXEMPTION,	BUT THAT IS WHEN YOU'RE DEVELOPING DATA,
10 THAT YOU H	AVE A REASONABLE EXPECTATION THAT YOU'RE
11 GOING TO S	UBMIT TO THE FDA. SO THEN IF YOU THINK
12 ABOUT RESE	ARCH EARLIER THAN THAT, THAT IS THE STAGE
13 THAT IS AT	RISK WHERE THERE COULD BE LITIGATION
14 BROUGHT AG	AINST A COMPANY THAT IS EARLIER ON IN THE
15 PROCESS TH	AN DEVELOPING DATA THAT IT WOULD
16 REASONABLY	EXPECT TO SUBMIT TO FDA.
17	CHAIRMAN ROTH: I THINK IT'S FAIRLY RARE
18 THAT WE'D	HAVE AN INJUNCTION AT THE PHASE WE'RE
19 TALKING AB	OUT.
20	MR. EARP: I THINK IT WOULD BE VERY RARE,
21 AND, FRANK	LY, THERE'S RELATIVELY LITTLE LITIGATION
22 THAT GOES	ON IN THAT AREA BECAUSE WHAT'S THE
23 COMMERCIAL	VALUE, RIGHT? BUT HAVING SAID THAT,
24 IT'S CERTA	INLY NOT A GUARANTEE THAT JUST BECAUSE A
25 VC HAS PUT	FUNDS INTO A COMPANY, THAT THEY'VE DONE
	62

1	A THOROUGH OR THOUGHTFUL ANALYSIS OF THE IP
2	SITUATION. THERE ARE A NUMBER COMPANIES OUT THERE
3	OPERATING TODAY WHERE I WOULD SAY THEY HAVE IP
4	ISSUES BRINGING A PRODUCT FORWARD TO
5	COMMERCIALIZATION. MAYBE THEIR DECISION IS WE GET
6	IT TO A POINT WHERE WE HAVE TO LICENSE SOMETHING,
7	WE RECOGNIZE THAT WILL HAPPEN IF AND WHEN WE GET TO
8	THE POINT WHERE WE HAVE A REAL COMMERCIAL
9	OPPORTUNITY.
10	CHAIRMAN ROTH: TED AND MICHAEL, YOU WANT
11	TO ADD TO THAT?
12	MR. GOLDBERG: NO, THANK YOU.
13	CHAIRMAN ROTH: TED?
14	DR. LOVE: NO.
15	CHAIRMAN ROTH: I THINK WE KEEP THIS
16	SIMPLY LOOKING, FOR THE TIME BEING, UNLESS THERE'S
17	SOMEBODY WANTS TO MAKE A STRONG CASE FOR LOOKING AT
18	IP, WE'RE GOING TO LOOK AT THE LITIGATION AGAINST
19	THE PRINCIPALS AND/OR THE COMPANY FOR OTHER THINGS.
20	MR. EARP: MY SECOND COMMENT WENT TO THE
21	ISSUE THAT DUANE RAISED ABOUT FLEXIBILITY FOR
22	ACCELERATED TERMS OF PAYBACK. I THINK IT IS REALLY
23	IMPORTANT THAT FLEXIBILITY IS MAINTAINED THERE.
24	YOU MENTIONED THE NOTION THAT IF A COMPANY IS IN A
25	PIVOTAL TRIAL, YOU WOULDN'T WANT TO AUTOMATICALLY
	63

1	HAVE THE LOAN PAYABLE AT THAT POINT BECAUSE THEY
2	MAY STILL BE DEPENDING ON THOSE FUNDS TO COMPLETE
3	THE TRIAL, OF COURSE.
4	IT MAY ALSO BE FOR EARLY STAGE COMPANIES
5	THAT AN M&A TRANSACTION MAY STILL BE BETWEEN TWO
6	VERY EARLY STAGE COMPANIES THAT HAVE PROMISING
7	RELATED TECHNOLOGIES AND THAT LOAN MONEY MAY STILL
8	BE VERY IMPORTANT FOR THOSE COMPANIES GOING
9	FORWARD. SO I THINK HAVING AN OPPORTUNITY FOR CIRM
10	TO REVIEW THE SITUATION, BUT GIVE IT FLEXIBILITY,
11	NOT AN AUTOMATIC REPAYMENT OF THE LOAN UPON THOSE
12	SORTS OF EVENTS, IS A GOOD IDEA.
13	CHAIRMAN ROTH: PERHAPS WHAT WE CAN THINK
14	ABOUT THERE, AND I AGREE WITH DAVID'S COMMENTS,
15	THAT WE CAN HAVE A REVIEW AND HAVE THE ULTIMATE
16	RIGHT TO RECALL IT SHOULD WE NOT AGREE THAT THIS
17	ISN'T A CHANGE OF CONTROL, BUT ALSO THE CIRM STAFF
18	WOULD HAVE THE RIGHT TO EXTEND IT AND SAY THAT IT
19	CAN GO FOR THE REST OF THE REMAINING TERM.
20	WITHIN THE PIVOTAL TRIAL, I SAID WITHIN
21	SIX MONTHS OF STARTING THE PIVOTAL TRIAL. THAT'S
22	KIND OF WHAT I WAS THINKING. YOU CAN'T DO IT THE
23	DAY YOU START, BUT WITHIN SIX MONTHS OF BEGINNING
24	YOUR PIVOTAL TRIAL, THAT COULD BE A TRIGGER.
25	THAT'S ONE OF THE ONES THAT WE NEED TO TALK ABOUT.
	64

1	ALL OF THESE HINGED ON THIS CONCEPT THAT IF WE GIVE
2	A LONG TERM, WE'RE GOING TO HAVE SOME TRIGGERS THAT
3	CAUSE EARLY REPAYMENT, AND THOSE WE WANT TO BRING
4	IN. IF WE GO FOR A SHORTER TERM, THEN THESE ISSUES
5	WON'T COME UP, BUT I WAS CONVINCED BY THE FINANCIAL
6	SIDE THAT FIVE TO SEVEN YEARS IS JUST TOO SHORT FOR
7	WHAT WE'RE ASKING FOR HERE IN TERMS OF REPAYMENT.
8	MR. EARP: ARE YOU THINKING THAT IF YOU
9	HAVE A LONG-TERM OVERALL LOAN STRUCTURE, BUT THAT
10	IT IS TIERED WITH MILESTONE ACHIEVEMENTS, THAT THE
11	FAILURE AT ONE PARTICULAR MILESTONE, SO YOU,
12	THEREFORE, DON'T GET THE REST OF THE LOAN AMOUNT,
13	WOULD BE AN AUTOMATIC TRIGGER TO REPAY THE EARLIER
14	AMOUNT?
15	CHAIRMAN ROTH: I HAVE NOT THOUGHT
16	THROUGH THAT, BUT WE'RE GOING TO GET TO THIS NEXT
17	SECTION ON RECOURSE AND NONRECOURSE LOANS, AND I
18	THINK THAT'S WHERE I'D LIKE TO THINK ABOUT YOUR
19	QUESTION. ANY OTHER COMMENTS FROM THE PUBLIC OR
20	ANY COMMITTEE MEMBERS?
21	MR. KLEIN: CAN DAVID MAKE A COMMENT ON
22	SCALE THAT'S NECESSARY TO GET THROUGH THIS II-A?
23	MR. EARP: I THINK THAT SOME OF THE
24	NUMBERS THAT WE'VE BEEN TALKING ABOUT TODAY ARE
25	VERY SMALL IN COMPARISON TO WHAT OUR VIEW IS, THAT
	65

1	THE EXPENSE THAT WILL BE REQUIRED FOR A PHASE II
2	CLINICAL TRIAL FOR THESE SORTS OF CELL THERAPIES.
3	THE NUMBERS THAT WE ARE LOOKING AT ARE MANY TENS OF
4	MILLIONS OF DOLLARS FOR A PHASE II TRIAL,
5	POTENTIALLY A \$100 MILLION. IT'S GOING TO
6	ABSOLUTELY DEPEND ON THE INDICATION AND THE CELL
7	TYPE THAT YOU'RE MAKING, BUT MANUFACTURING COSTS,
8	I'M TALKING ABOUT ALL OF THE ROLLED-IN COSTS HERE,
9	BUT JUST THINKING ABOUT CAPITAL EXPENDITURE TO
10	PRODUCE 10 TO THE 11 OR 10 TO THE 12 CELLS PER
11	PATIENT FOR A CARDIOMYOCYTE HEART FAILURE CLINICAL
12	TRIAL, FOR EXAMPLE, ARE GOING TO BE VERY LARGE.
13	SO WE'VE BEEN TALKING, AND NUMBERS HAVE
14	BEEN BANDIED AROUND HERE TODAY, FIVE MILLION FOR A
15	PHASE I, 10 OR 15 MILLION FOR A PHASE II. I THINK
16	WE'RE LOOKING AT A MULTIPLE OF THAT. AND EVEN IF
17	YOU I THINK EVERYBODY IS GOING TO BE SOMEWHAT
18	LEERY OF TAKING BIG PHARMA AT FACE VALUE; BUT WHEN
19	YOU LOOK AT THEIR COSTS TODAY, THEY'RE PROJECTING
20	800 MILLION TO A BILLION DOLLARS TO BRING A DRUG
21	THROUGH DEVELOPMENT TO COMMERCIALIZATION.
22	SO WE'RE TALKING HERE ABOUT COMPLETELY
23	NOVEL THERAPIES WHERE NEW TECHNOLOGIES AND NEW
24	MANUFACTURING CAPABILITIES HAVE TO BE DEVELOPED,
25	AND I THINK THAT WE'RE GOING TO SEE NUMBERS COMING
	66

1	IN MUCH LARGER THAN THE FIVE MILLION FOR PHASE I OR
2	THE 20 MILLION FOR A PHASE II TRIAL ACTUALLY.
3	CHAIRMAN ROTH: JUST TO CLARIFY, MY
4	COMMENTS WERE ABOUT PHASE II-A OR I-B, II-A-TYPE
5	STUDIES, NOT I THINK WHAT YOU ARE TALKING ABOUT,
6	WHICH WOULD BE MUCH BIGGER IN SCOPE, MAYBE A
7	II-B-TYPE STUDY WITH A HUNDRED MILLION AND A LOT OF
8	ADDITIONAL COST THAT WOULD BE PART OF THE
9	MANUFACTURING, GETTING THAT IN READY, AND OTHER
10	THINGS AS WELL.
11	WE HAVE A LIMITED AMOUNT OF FUNDS HERE,
12	AND WE HAVE TO FIGURE OUT IF WE DO THOSE TYPES OF
13	PROJECTS, WE DON'T DO MANY. AND IF WE WANT TO
14	CONTINUE TO PUSH THINGS ALONG, I THINK WE'LL HAVE
15	TO BE CAREFUL WITH HOW MUCH WE CAN ACTUALLY
16	ALLOCATE TOWARDS ANY ONE PROGRAM. AGAIN, THOUGH,
17	THAT'S ALL THE RFA. SO IT'S REALLY NOT GOING TO BE
18	THE POLICY. THE POLICY WILL BE THESE THINGS, AND
19	THE SCOPE OF THAT IS REALLY UP TO CIRM AND THE ICOC
20	TO APPROVE HOW BIG DO YOU WANT TO GO.
21	MR. KLEIN: AS THESE NUMBERS GET LARGE,
22	IT'S GOING TO BE MORE AND MORE IMPORTANT TO HAVE
23	VERY SUBSTANTIAL MATCHING FUNDS. SO IF WE'RE
24	HAVING A MAJOR INVESTMENT IN ONE OF THESE, WE'RE
25	GOING TO WANT TO SEE A LOT OF MONEY INVESTED BEFORE
	67

1	WE INVEST IN BRINGING THE PRODUCT TO THAT POINT.
2	AND WITH LARGE MONIES, THERE'S GOING TO BE VERY
3	SUBSTANTIAL MATCHING, I WOULD THINK. IT GIVES US
4	THE KINDS OF ASSURANCES WE NEED TO PROVIDE OUR
5	RESPONSIBILITY TO THE TAXPAYERS AND TO PATIENTS
6	THAT WE'RE PROPERLY ALLOCATING FUNDS AND SOMEBODY
7	ELSE IS TAKING A VERY SUBSTANTIAL RISK.
8	CHAIRMAN ROTH: OTHER COMMENTS ON THE
9	PHONE? OKAY.
10	LET'S GO TO NO. 2, I THINK IS IT'S NOT
11	NO. 2. B, THE INTEREST RATE, THIS IS ONE THAT I'M
12	NOT TOO ANIMATED ABOUT. I THINK WE SAW THE RANGES,
13	THAT IT'S GOING TO BE PRIME PLUS SOMETHING. AND IT
14	WILL RELATE TO WHAT WE GET TO AT THE BOTTOM, WHICH
15	IS THE WARRANT COVERAGE, WHICH IS PROBABLY ONE OF
16	THE AREAS WE SHOULD GO TO FAIRLY QUICKLY. IF
17	ANYBODY WANTS TO TALK INTEREST RATES RIGHT NOW, WE
18	COULD DO THAT.
19	MR. KLEIN: COULD YOU GO AND TALK ABOUT
20	WARRANT COVERAGE BECAUSE IT PLAYS BACK TO THIS?
21	CHAIRMAN ROTH: LET ME JUMP THROUGH
22	SUBORDINATION, IF I COULD, FIRST. WE HEARD CLEARLY
23	FROM THE INVESTMENT COMMUNITY THAT THIS DEBT NEEDS
24	TO BE SUBORDINATED TO OTHER FORMS OF DEBT. AND
25	THERE DIDN'T SEEM MUCH ROOM THERE FOR US TO COME IN
	68

1	WITH THINGS THAT WOULDN'T CAUSE REALLY IMPORTANT
2	PROBLEMS FOR THE COMPANIES OR THE IDEAS AS THEY
3	MOVE FORWARD, SO THEY WOULD BE SUBORDINATED.
4	WE TALKED ABOUT INTELLECTUAL PROPERTY, IN
5	THE EVENT THAT THERE'S NO OTHER LIENS ON THE
6	COMPANY AND THEY ABANDON THE INTELLECTUAL PROPERTY,
7	THAT THAT SHOULD COME BACK TO CIRM. IF WE CAN
8	WE WON'T TAKE IT NECESSARILY AS A SECURED INTEREST,
9	BUT WE HAVE THE RIGHT TO HAVE IT BACK IN THE EVENT
10	THE COMPANY GOES OUT OF BUSINESS OR ABANDONS THEIR
11	INTELLECTUAL PROPERTY. THAT WAS ABOUT THE EXTENT
12	OF THE FEEDBACK WE GOT, BUT THERE SEEMED TO BE
13	UNIFORM AGREEMENT ON THAT FROM BOTH THE FINANCIAL
14	INPUT AND FROM THE COMPANY INPUT.
15	ANYONE WANT TO TALK ABOUT THAT? NO
16	SECURITY, THOSE KIND OF THINGS WOULD NOT BE, NO
17	PERSONAL GUARANTEES, ANYTHING LIKE THAT.
18	OKAY. WE'RE GOING TO THEN
19	MR. KLEIN: IN A SENSE, WE SHOULD
20	EMPHASIZE THAT MATCHING FUNDS IS THE ULTIMATE FORM
21	OF SECURITY IF YOU'RE DEPENDING UPON A THIRD A
22	REAL ANALYSIS OF SOMEONE'S BELIEF IN THEIR OWN
23	FINANCIAL PLAN AND FEASIBILITY PLAN.
24	CHAIRMAN ROTH: BOB, LET ME MAKE SURE
25	WE'RE ALL ON THE SAME PAGE ON THIS. YOU KEEP USING
	69

1	THE WORD "MATCHING FUNDS." DO YOU HAVE IN MIND
2	THAT YOU WOULD WANT THIS LOAN MATCHED AT THE TIME
3	THEY GIVE IT, SO THEY WOULD APPLY FOR A 3 MILLION
4	LOAN AND THEY WOULD SAY WE HAVE THREE MILLION TO
5	MATCH IT?
6	MR. KLEIN: ON LARGER LOANS, MY OWN
7	PERSPECTIVE IS THAT SIGNIFICANT MATCHING FUNDS
8	WOULD BE VERY IMPORTANT. AS YOU GET TO START-UPS
9	AND SMALLER LOANS, YOU MAY HAVE A LOWER RATIO, JUST
10	SOME CAPITAL ON THE TABLE. BUT WHEN YOU GET INTO
11	LARGER LOANS, A VERY SIGNIFICANT MATCH, I THINK,
12	WOULD BE IMPORTANT FOR THE REASONS THAT JEFF
13	OUTLINED.
14	CHAIRMAN ROTH: I THINK WE NEED TO HAVE A
15	LOT MORE DISCUSSION ABOUT THAT BECAUSE I WOULD
16	ARGUE IF YOU'RE AT THAT STAGE AND YOU STILL CAN'T
17	RAISE MONEY FROM THE EQUITY MARKETS OR THE VENTURE
18	DEBT MARKETS, SOMETHING'S NOT QUITE RIGHT THERE.
19	MR. KLEIN: MARKETS AREN'T THERE.
20	MR. GOLDBERG: WE AGREE WITH THAT, DUANE.
21	CHAIRMAN ROTH: THE MARKETS ARE THERE,
22	BOB. THEY MAY NOT IN THE COUPLE OF EXAMPLES THAT
23	YOU'VE TALKED ABOUT, BUT GENERALLY SPEAKING, THE
24	MARKETS ARE THERE WHEN SOMEBODY IS IN THAT PHASE OF
25	TESTING AND THEY'RE RAISING THAT AMOUNT OF MONEY.
	70

1	IT ISN'T THAT WE CAN'T PARTICIPATE, BUT I'M
2	CONCERNED THAT
3	MR. KLEIN: YOU THINK THE MARKETS ARE
4	THERE FOR II-A, FOR EXAMPLE? YOU THINK THE MARKETS
5	ARE THERE IN STEM CELL RESEARCH FOR HUMAN EMBRYONIC
6	STEM CELL RESEARCH FOR II-A? I DON'T THINK THEY'RE
7	THERE. I THINK MAYBE WE COULD GET SOME COMMENT
8	FROM THE PUBLIC.
9	CHAIRMAN ROTH: IT'S THE IDEA OF THE
10	SUBSTANTIAL MATCHING FUNDS AND THE LEVERAGE PART
11	AND HOW YOU'RE GOING TO DO THAT I THINK IS CAUSING
12	ME TO FIGURE OUT HOW WE DO THAT THROUGH AN RFA AND
13	HAVE IT IN A TIMEFRAME WHEN THE MONEY IS GOING TO
14	BE PATIENT AND SAY, OKAY, YOU GO AHEAD AND GET YOUR
15	APPROVAL FROM CIRM, GET YOUR LOAN, AND THEN WE'RE
16	COMING IN WITH THE MATCHING FUNDS.
17	MR. KLEIN: YOU'RE SAYING THAT IF THEY
18	HAVE THAT SUBSTANTIAL MATCHING FUND.
19	CHAIRMAN ROTH: YEAH.
20	MR. KLEIN: WELL, YOU KNOW, I'LL RESERVE
21	THE COMMENTS, BUT FROM WHAT I'VE SEEN, I DON'T
22	THINK THAT I THINK THERE ARE COMPANIES OUT THERE
23	IN THIS COUNTRY AND IN OTHER COUNTRIES, AND I THINK
24	THIS IS REPORTED ALL ACROSS THE WORLD, WHERE THEY
25	HAVE SIGNIFICANT FUNDS. THEY JUST CAN'T GET THERE
	71

1	BECAUSE THEY DON'T HAVE ENOUGH FUNDS AND THE
2	MARKETS ARE NOT THERE TO GET THEM TO THE LEVEL THEY
3	NEED TO GO THROUGH THESE TRIALS, PARTICULARLY IN
4	THE EARLY TRIALS BECAUSE THE FDA REQUIREMENTS ARE
5	GOING TO BE VERY SEVERE.
6	CHAIRMAN ROTH: WELL, OKAY. BUT WHAT I'M
7	TRYING TO DO WITH THIS IS THE POLICY. THAT DEALS,
8	AGAIN, WITH THE RFA. IF THE POLICY IS GOING TO
9	REQUIRE MATCHING FUNDS, THEN WE SHOULD HAVE A LONG
10	DISCUSSION ABOUT MATCHING FUNDS. AND MY OWN VIEW
11	IS THAT THAT'S EXTREMELY COMPLICATED TO ADMINISTER
12	AND TO GET THEM LINED UP AND THEN THE TIMING.
13	SO OTHERS CAN MAKE COMMENTS ON THAT, BUT
14	I THINK THESE ARE IMPORTANT THINGS WE NEED TO GET
15	SETTLED FAIRLY QUICKLY IF WE'RE GOING TO MOVE THIS
16	POLICY ALONG.
17	MR. SHEEHY: I'D LIKE TO HEAR BACK WHAT
18	CHRIS FINDS BECAUSE I THINK THAT WAS ONE OF THE
19	THINGS WE TASKED HIM WITH. WE SHOULD HAVE A
20	DISCUSSION. MY REAL GOAL WOULD BE TO SERVE SOME OF
21	THOSE POLICY ISSUES THAT WE IDENTIFIED IF WE NEEDED
22	SOME VALIDATION. IF IT'S USEFUL FROM THAT POINT OF
23	VIEW, BUT I'M WITH YOU. I THINK THAT IT CAN BE A
24	VERY COMPLICATED THING, AND IT SEEMS LIKE AT
25	DIFFERENT PLACES, OBVIOUSLY FOR A START-UP COMPANY,
	72

1	YOU'D ONLY BE TALKING ABOUT FORWARD-LOOKING
2	MATCHING FUNDS WHEN SOMEBODY IS WELL ESTABLISHED.
3	SO THERE'S A LOT OF DIFFERENT KINDS OF SCENARIOS
4	YOU CAN BUILD OUT, AND I DON'T KNOW IF THAT'S
5	REALLY HELPFUL WHEN YOU'RE TRYING TO DRIVE POLICY
6	TO HAVE A WHOLE MENU OF DIFFERENT SCENARIOS. I
7	THINK IF WE CAN JUST MAYBE PUNT AND LET CHRIS COME
8	BACK TO US.
9	CHAIRMAN ROTH: IF THERE'S A NEED AND
10	THERE'S A WAY THAT WE CAN THINK ABOUT HOW WE MIGHT
11	DO THAT IN THE RFA PROCESS, I WOULD BE VERY
12	SUPPORTIVE. BUT I WORRY THAT IT COULD BE A REAL
13	HINDRANCE BECAUSE THE TIMING ISSUES, FOR US TO BE
14	ABLE TO BE RESPONSIVE, HAVE THE PROCESS, HAVE THE
15	BUSINESS REVIEW, THEN THE OUT-OF-STATE REVIEW, AND
16	THEN TO ACTUALLY MAKE THE LOANS IS A TIME-CONSUMING
17	PROCESS. AND TO GET AN INVESTOR WHO'S NOW EXCITED
18	AND READY TO PUT UP MONEY ALONGSIDE, TO WAIT
19	PATIENTLY FOR US TO SEE EVEN WHAT'S GOING TO HAPPEN
20	WOULD BE A CHALLENGE.
21	I BELIEVE THE MONEY ITSELF, ONCE YOU GO
22	THROUGH THAT PROCESS, WILL BE LEVERAGED TO GO GET

THROUGH THAT PROCESS, WILL BE LEVERAGED TO GO GET MORE MONEY. THAT'S IN ITSELF, YOU'VE JUST SHOWN THE WORLD THAT WHAT YOU HAVE WAS DEEMED CREDIBLE BY THIS PROCESS. I'M NOT OPPOSED TO IT, BOB. I THINK

73

1	IT'S JUST RIGHT NOW TO PUT A MATCHING REQUIREMENT
2	ON TOP OF THIS LOAN, I THINK, WOULD COMPLICATE IT.
3	I THINK WE COULD DO THAT WHEN WE GET TO THE RFA
4	PROCESS BECAUSE WE COULD JUST SIMPLY SAY YOU HAVE
5	TO MATCH X OR MATCH
6	MR. KLEIN: ONE OF THE THINGS WE COULD DO
7	IS SAY MATCHING WHEN DEEMED FEASIBLE IN THE
	UNDERWRITING AND BASED UPON THE SPECIFIC FACTS OF
8	
9	THE PROJECT. IF IT'S AN ALS, YOU'RE NOT GOING TO
10	GET MATCHING. IT'S THE MINUTE MARKET. IN OTHER
11	CASES, YOU HAVE SOME COMPANIES THAT HAVE BEEN OUT
12	THERE FOR A NUMBER OF YEARS, THEY'VE RAISED MONEY
13	PREVIOUSLY, THE MONEY IS SITTING THERE. AND IF
14	THEY WANT A SUBSTANTIAL AMOUNT OF MONEY, THEY'VE
15	GOT MATCHING FUNDS THEY CAN PUT ON THE TABLE. YOU
16	ALSO HAVE FOUNDATIONS LIKE THE MICHAEL J. FOX
17	FOUNDATION, ETC., WHO CAN PUT UP MATCHING FUNDS.
18	SO WITHOUT MAKING IT AN IRONCLAD
19	REQUIREMENT, YOU CAN STATE POLICY PREFERENCES AND
20	OBJECTIVES, AND THEN IN THE RFA PROCESS WORK OUT
21	WHAT YOU CAN REALLY ACHIEVE.
22	CHAIRMAN ROTH: OR YOU CAN MAKE IT PART
23	OF THE MILESTONE. THE COMPANY COULD COME IN AND
24	SAY BEFORE I PULL DOWN THE FIVE MILLION FOR THE
25	PHASE II-A, I WILL HAVE ANOTHER FIVE MILLION TO GO
	74

1	WITH IT. THAT GIVES THEM PLENTY OF TIME TO WORK ON
2	IT AND THEN THEY CAN DO IT. SOMETHING LIKE THAT, I
3	THINK, WAS MUCH MORE FEASIBLE, THAT AT MILESTONE
4	THREE, ONE AND TWO ARE SORT OF ONE MILLION, ONE
5	MILLION, BUT MILESTONE THREE, WHICH IS FIVE
6	MILLION, YOU'RE GOING TO HAVE TO HAVE THE OTHER
7	FIVE WITH IT.
8	MR. KLEIN: I THINK IT'S A REASONABLE
9	OPTION, BUT YOU NEED TO MAYBE YOU SAY MATCHING
10	AT THE EARLIEST REASONABLE AND FEASIBLE DATE; BUT,
11	YOU KNOW, CERTAINLY IF IT'S A START-UP, YOU MAY
12	NEED TO PUT SOME MONEY OUT THERE WITH SOME VERY
13	SMALL PRIOR INVESTMENT IN ORDER TO GET TO THE NEXT
14	MILESTONE.
15	DR. LOVE: I JUST WANT TO MAKE ANOTHER
16	COMMENT ON THE TRIALS AND THE COST OF THESE TRIALS.
17	I WOULD THINK THAT WE OUGHT TO HAVE AT LEAST
18	INITIALLY AN INTEREST IN LOOKING AT AREAS WHERE WE
19	THINK THE TREATMENT IMPACT IS GOING TO BE DRAMATIC.
20	AT LEAST IN MY EXPERIENCE, WHEN THE TREATMENT
21	IMPACT IS DRAMATIC, REALLY SHOULDN'T BE LOOKING AT
22	HOW MANY PATIENTS. I THINK BACK TO THE EARLY
23	TRIALS IN BIOTECH WHERE IT WAS REPLACEMENT THERAPY.
24	IT DOESN'T TAKE A LOT OF PATIENTS TO FIGURE OUT IF
25	YOUR INSULIN IS WORKING. IT DOESN'T TAKE A LOT OF
	75

1 PATIENTS TO FIGURE OUT IF CEREDASE IS WORKING. 2 SO I'M A LITTLE BIT PERPLEXED IN SOME 3 WAYS IN THINKING ABOUT TRIALS THAT ARE GOING TO 4 COST \$150 MILLION. TO ME THAT SEEMS LIKE AN 5 INCREDIBLY BIG TRIAL, AND I WOULDN'T ORDINARILY 6 EXPECT WE'D BE LOOKING, AT LEAST EARLY ON, TO SEE 7 TREATMENT EFFECTS OF THAT SIZE. 8 CHAIRMAN ROTH: OKAY. SO I THINK 9 THERE'S, AGAIN, A WIDE RANGE OF INTEREST IN THESE 10 LOANS AND THE SIZE AND SCOPE AND MANY THINGS, BUT I THINK WE'RE GOING DOWN TO THE REAL DETAILS OF WHAT 11 12 THIS POLICY HAS TO LOOK LIKE. PROBABLY THE MOST 13 IMPORTANT THING WE'RE GOING TO TALK ABOUT IN THE 14 LAST 15 MINUTES TODAY IS THE WARRANT COVERAGE. AND 15 I'M GOING TO ASK JOHN TO HELP US WALK THROUGH THE 16 TWO CONCEPTS THAT WE HAVE HERE, AND THESE ARE TWO 17 IMPORTANT CONCEPTS. 18 ONE BEGINS WITH WHETHER THE LOAN IS 19 SELECTED AS A RECOURSE LOAN, WHICH MEANS THE LOAN 20 IS DUE REGARDLESS OF THE PRODUCT'S SUCCESS OR 21 FAILURE, THAT THE COMPANY TAKES THE LOAN. AND THE 22 SECOND WOULD BE NONRECOURSE LOAN WHERE THE LOAN IS 23 AGAINST THE PRODUCT ONLY. AND IF THE PRODUCT IS 24 UNSUCCESSFUL, IT IS -- THEREFORE, THE LOAN IS 25 FORGIVEN.

76

1	NOW, THE IDEA TO DO THAT WOULD BE THAT
2	THERE'S DIFFERENT WARRANT COVERAGE ON THESE TWO
3	DIFFERENT RISK PROFILES. ONE YOU'RE TAKING THE
4	RISK ALL ON THE PRODUCT, THE OTHER YOU'RE TAKING A
5	RISK WITH THE COMPANY. AND THAT'S WHERE JOHN COMES
6	IN AND SORT OF HIS BACKGROUND AND EXPERTISE TO HELP
7	US UNDERSTAND WARRANTS THAT ARE WARRANTS TO BUY A
8	PERCENT OF THE COMPANY OR WARRANTS THAT ARE A
9	PERCENT OF THE AMOUNT OF THE LOAN YOU MAKE. SO
10	JOHN.
11	MR. HALE: IS MY BOOMING VOICE CARRYING
12	NOW? SO, LOOK, A WARRANT IS JUST A STOCK OPTION.
13	IT'S A RIGHT TO BUY STOCK AT A CERTAIN PRICE. AND
14	THE THINGS THAT YOU THINK ABOUT ARE HOW MANY SHARES
15	CAN YOU BUY? WHAT TYPE OF STOCK IT IS, AND WHAT'S
16	THE PRICE GOING TO BE? REALLY WHEN WE TALK ABOUT
17	WARRANT COVERAGE AND A PERCENTAGE OF THE COMPANY,
18	THAT'S GOING TO THE QUESTION OF HOW MANY SHARES AM
19	I ALLOWED TO BUY.
20	ONE OF THE PREMISES HERE ON OUR PROGRAM
21	IS THAT THERE WILL BE WARRANTS, UNLIKE A LOT OF THE
22	OTHER STATES THAT CHRIS TALKED ABOUT. I MEAN
23	THERE'S A TRADITION OF WARRANTS, OF LENDERS TAKING
24	WARRANTS IN CALIFORNIA. FOR YEARS AND YEARS AND
25	YEARS, THE LENDERS HAVE DONE THAT, THE BANKS HAVE
	77

1	DONE THAT. ALL THE VENTURE FUNDS THAT HAVE GOTTEN
2	INTO THIS MARKET ARE ABLE TO MAKE LOANS AT
3	COMPETITIVE RATES BECAUSE THEY TAKE HIGHER
4	WARRANTS. THEY PROMISE THEIR LP'S, THEIR INVESTORS
5	WHEN THEY COME IN, YOU GUYS, YOU'RE NOT GOING TO
6	MAKE MONEY ON THE COUPON ON PRIME PLUS ONE THAT
7	WE'RE GOING TO BE CHARGING THE COMPANIES. WHERE
8	YOU ARE GOING TO MAKE MONEY IS THE WARRANTS BECAUSE
9	WE'RE GOING TO PICK THOSE COMPANIES, THOSE
10	COMPANIES ARE GOING TO DO WELL, EVENTUALLY WE'RE
11	GOING TO BE ABLE TO MAKE MONEY JUST LIKE THE
12	VENTURE GUYS DO WHEN THE COMPANIES GO PUBLIC.
13	SO REALLY WHAT WE'RE TALKING ABOUT HERE
14	IS WE'RE GETTING INTO THESE COMPANIES REAL EARLY
15	ON. WE SEE THE VALUE IN THE COMPANIES. THE
16	WARRANTS ARE GOING TO GIVE US A PIECE OF THE
17	COMPANY ONE WAY OR THE OTHER, HOWEVER MEASURED, AS
18	THE COMPANY BECOMES MORE AND MORE SUCCESSFUL.
19	THAT'S REALLY WHAT WE WANT TO DO. WE WANT TO SHARE
20	IN THE SUCCESS OF THE COMPANY. MAKES COMPLETE
21	SENSE. WE WERE THERE ON DAY ONE, WELL BEFORE THE
22	VENTURE GUYS EVER GOT THERE. THAT'S WHERE WE WERE.
23	SO WE'RE REALLY PARTNERING UP WITH THE PROSPECTIVE
24	BORROWERS GETTING THE WARRANTS.
25	SO YOU SAY, OKAY, WELL, LET'S LOOK AT THE

78

1	DIFFERENT ELEMENTS OF STOCK OPTION, OF A WARRANT.
2	HOW MANY SHARES CAN YOU BUY? THAT'S SORT OF ONE
3	CRITICAL THING. THIS WARRANT COVERAGE IS ONE OF
4	THE WAYS THE VENTURE GUYS AND THE LENDERS EXPLAIN
5	HOW MANY SHARES THEY CAN BUY, AND THEY EXPRESS IT
6	AS A PERCENTAGE OF THE LOAN. SO SAY WE'RE MAKING A
7	MILLION-DOLLAR LOAN AND YOU HAVE 20-PERCENT WARRANT
8	COVERAGE. SO 20 PERCENT OF A MILLION IS 200,000
9	I USUALLY HAVE A CALCULATOR AT MY DESK. I'LL JUST
10	ASSERT TO YOU THAT IT'S 200,000 RIGHT NOW. SO THAT
11	SAYS THAT WE HAVE \$200,000 TO PLAY WITH, THAT WE'RE
12	ALLOWED TO BUY \$200,000 WORTH OF STOCK. WELL, YOU
13	SAY THAT'S FINE. WE HAVE THAT BUNDLE OF MONEY, BUT
14	WHAT'S THE STOCK PRICE? YOU HAVE 200,000, BUT WHAT
15	ARE YOU GOING TO PAY FOR IT? AND WE'LL TALK ABOUT
16	HOW YOU DECIDE WHAT THE PRICE IS GOING TO BE.
17	WHEN CHRIS SAID BEFORE THAT THERE WAS
18	SOME CONTROVERSY IN THE OTHER STATES AS TO SETTING
19	VALUATION, I THINK IT'S REALLY EASY TO SETTLE THAT
20	CONTROVERSY. YOU SAY IT'S THE FAIR MARKET VALUE OF
21	THE STOCK. WHAT DID THE COMPANY LAST ISSUE THE
22	SHARES AT? THAT'S THE PRICE THAT WE'RE WILLING TO

23 PAY. THE VENTURE GUYS WOULD LIKE TO SAY, WELL,

24 HERE, TAKE ANOTHER -- TAKE A FUTURE PRICE, TAKE THE

25 NEXT-ROUND PRICE BECAUSE THAT WAY YOU'RE GOING TO

79

1	BE TAKING LESS RISK.
2	TO ME, WE CAN KICK THAT AROUND, BUT THE
3	KEY NOTION IS THAT WARRANT COVERAGE, YOU MEASURE IT
4	AS A PERCENTAGE OF THE LOAN. AND AS DUANE WAS
5	SAYING, WE'RE LOOKING AT TWO REALLY DIFFERENT
6	PRODUCTS. WE'RE LOOKING AT A NONRECOURSE LOAN,
7	REALLY WE'RE LOOKING JUST TO THE PRODUCT. IF THE
8	PRODUCT'S A HIT, WE'RE GOING TO GET PAID BACK. IF
9	THE PRODUCT'S NOT A HIT, TOO BAD. WE TOOK OUR
10	CHANCES. WE DID OUR DILIGENCE, BUT JUST LIKE ANY
11	NEW COMPANY, YOU'RE NOT GOING TO GET A HUNDRED
12	PERCENT HIT RATE. THE VENTURE GUYS, IT'S LIKE IN
13	BASEBALL. IF YOU'RE BATTING 300, YOU'RE AN MVP.
14	IF YOU'RE A VENTURE GUY, YOU'RE BATTING ONE OUT OF
15	FIVE AND YOU'RE A ZILLIONAIRE. KNOCK WOOD. WE'RE
16	GOING TO BE SOMEWHERE UP THERE. THE WARRANT'S
17	GOING TO LET US SHARE A LITTLE BIT IN THAT.
18	THE WARRANT COVERAGE IS JUST THE
19	PERCENTAGE THAT WE'LL BE PICKING. SO YOU SAY WHAT
20	PERCENTAGE IS THAT, JOHN? WHAT'S THE MARKET?
21	WELL, IF YOU LOOK AT THE BANKS THAT ARE DOING THIS,
22	RIGHT NOW THEY'RE TAKING, SAY, WARRANT COVERAGE OF
23	ONLY 3 TO 4 PERCENT. NOW, WHY IS THAT? THAT'S
24	BECAUSE THERE'S SO MUCH COMPETITION IN THE MARKET
25	RIGHT NOW FOR COMPANIES AT THE VENTURE BACKED
	80

1	
1	LEVEL. THEY'RE JUST KILLING EACH OTHER. I MEAN
2	FIVE YEARS AGO IT WAS 10 PERCENT, EASY FOR ANY
3	COMPANY THAT WAS EVEN VENTURE BACKED. NOW YOU'RE
4	TALKING 3 TO 4 PERCENT BECAUSE THEY'RE ALL CHASING
5	THESE DEALS.
6	THAT'S CERTAINLY NOT OUR MARKET. WE'RE
7	NOT LENDING INTO COMPANIES THAT KLEINER PERKINS
8	JUST FUNDED. SO WE'RE SAYING, "OH, THANK GOODNESS.
9	WE'RE INTO THIS COMPANY. WE ARE VERY LUCKY THAT
10	THEY LET US INTO THIS." NO. THAT'S NOT WHAT
11	YOU'RE TALKING ABOUT. WE'RE TALKING REALLY ABOUT
12	THE SEED STAGE. IT'S BEFORE THE VENTURE GUYS EVEN
13	HIT. WE'RE HELPING COMPANIES MAKE THE TRANSITION
14	FROM ACADEMICS INTO THE MARKET. AND SO YOU'RE
15	GOING TO FOR SURE BE TALKING ABOUT HIGHER
16	PERCENTAGES THAN WHAT THE BANKS PROBABLY TALKED TO
17	YOU AT THE LAST MEETING OR WHENEVER YOU GUYS MET
18	WITH THEM.
19	SO YOU SAY, OKAY. WHAT IS A FAIR
20	PERCENTAGE? WELL, THE VENTURE LENDERS, THE GUYS
21	THAT ARE NOT THE BANKS, BUT THAT ARE LENDING INTO
22	THE COMPANIES, ARE TAKING WARRANT COVERAGE OF 10 TO
23	15 PERCENT. NOW, THEY'RE DOING THAT BECAUSE
24	THEY'RE NOT ASKING THE SAME SORTS OF PROTECTIONS
25	THAT THE BANKS INSIST ON WHEN THEY'RE LENDING INTO
	81

1	A COMPANY. THEY'RE OFFERING DEALS TO COMPANIES
2	THAT MIGHT NOT OTHERWISE BE BANKABLE, AND SO THEY
3	GET A HIGHER RETURN. THAT'S PART OF THE RISK. YOU
4	RISK YOUR DEAL, YOU GET A LITTLE BIT MORE JUICE ON
5	THE DEAL.
6	SO THAT'S WHAT THEY'RE GETTING. WE'RE
7	TALKING ABOUT COMPANIES THAT ARE REALLY EVEN BEFORE
8	THAT IN MANY INSTANCES. THESE ARE PRE-PREFUNDED
9	COMPANIES. THIS IS THE SEED MONEY. WE'RE RIGHT
10	AFTER THE FOUNDERS. SO YOU SAY WHAT'S FAIR? WHAT
11	ARE THE COMPARABLES THERE? I'LL BET YOU IF YOU
12	LOOKED REAL HARD, YOU'RE NOT GOING TO FIND A LOT OF
13	COMPARABLES. THERE'S NOT A HUGE MARKET. WE'RE
14	FILLING A GAP. WHAT WE'RE TALKING ABOUT HERE,
15	WE'RE PROVIDING A SERVICE, A PRODUCT, THAT'S NOT
16	REALLY AVAILABLE IN THE MARKET.
17	SO WHERE DO YOU GO WITH THAT? WELL, THE
18	NUMBERS THAT WE'VE BEEN KICKING AROUND ARE IT SEEMS
19	COMPLETELY AND UTTERLY FAIR TO ASK FOR COVERAGE
20	FROM 10 TO 20 PERCENT, I THINK 20 TO 25 PERCENT IS
21	VERY FAIR, AND NOBODY WOULD START WHACKING YOU ON
22	THE HEAD WITH A STICK FOR THAT ON A DEAL WHERE
23	YOU'RE EXPECTING TO GO GET REPAID.
24	IF YOU'RE SAYING, YOU KNOW WHAT, WE'RE
25	NOT EVEN GOING TO INSIST THAT WE GET REPAID. WE'RE
	82

1	LOOKING AT A PRODUCT LOAN. MY GOSH, NOW YOU'RE A
2	VENTURE CAPITALIST NOW. TO ME, 50 TO 100 PERCENT
3	COVERAGE MAKES COMPLETE SENSE. NOW, THAT'S NOW,
4	YOU HEAR THOSE NUMBERS AND YOU SAY, HOLY MACKEREL.
5	THOSE ARE BIG NUMBERS, BUT THEY'RE NOT REALLY, NOT
6	WHEN YOU THINK ABOUT WHAT THE PERCENTAGE IS. IT'S
7	A PERCENTAGE OF THE LOAN THAT YOU ARE MAKING, AND
8	YOU'RE SAYING WE'RE GOING TO HAVE A RIGHT TO BUY
9	STOCK USING THAT MONEY. SO IT'S NOT 50 PERCENT OF
10	A COMPANY. YOU'RE NOT TAKING OVER THE COMPANY.
11	LORD KNOWS, WHEN YOU TRANSLATE THIS COVERAGE INTO A
12	PERCENTAGE OF THE COMPANY, MAYBE 1 PERCENT, ONE AND
13	A HALF PERCENT, WELL, WELL, WELL, WITHIN THE
14	MARGINS OF WHAT ANY OF THE VENTURE GUYS WOULD BE
15	DELIGHTED TO SEE US DO A SEED FUND AND THEM GOING
16	IN LATER ON AFTER WE'VE HELPED THE COMPANY GET TO
17	THAT POINT.
18	MR. KLEIN: ONE AND A HALF PERCENT.
19	MR. HALE: OF THE COMPANY. IF YOU
20	TRANSLATE THE COVERAGE AND YOU SAY HOW MUCH
21	OUTSTANDING STOCK IN THE END IS IT GOING TO BE,
22	OFTEN THAT'S GOING TO BE THE RATE. OF COURSE, IT
23	VARIES COMPANY TO COMPANY. YOU HAVE TO DO THE
24	MATH.
25	MR. SHEEHY: WHAT CAN WE HOLD AS A STATE
	83

1	AND HOW LONG CAN WE HOLD IT? AS A STATE AGENCY, I
2	KNOW THE LIMITS ON WHAT WE CAN DO IN TERMS OF
3	HOLDING STOCK, SO THAT ALSO MIGHT BE A FACTOR IF WE
4	HAVE TO UNLOAD IT.
5	CHAIRMAN ROTH: ONE THOUGHT, AND, JOHN,
6	I'D LIKE YOUR HELP ON THIS, BUT THERE'S THIS
7	CASHLESS EXERCISE THAT YOU CAN ASK FOR AS PART OF
8	THE TERMS OF THE WARRANT, WHICH MEANS AT THE TIME
9	YOU GET READY TO SELL THE WARRANTS, WHATEVER THE
10	DIFFERENCE IS, THE GAIN, IF YOU PAY \$10 AND IT'S
11	\$20 A SHARE NOW, THE VALUE, THEY GIVE YOU \$10 WORTH
12	OF STOCK TO SELL IMMEDIATELY. YOU DON'T HAVE TO
13	WRITE THEM A CHECK FOR TEN, THEN THEY ISSUE THE
14	STOCK OR FOR 20, 10 AND THEY ISSUE THE STOCK,
15	YOU SELL IF FOR 20 AND PAY THEM BACK 10. SO IT'S
16	CASHLESS, MEANING THAT THE TRANSACTION IS
17	INSTANTANEOUS.
18	MR. HALE: WHICH IS PRETTY MUCH WHAT THE
19	BANKS DO. THE BANKS DO NOT WANT TO WRITE A CHECK
20	TO A COMPANY TO BUY STOCK. THEY'RE JUST
21	FUNDAMENTALLY CHEAP. THEY WON'T DO IT. SO THEY'LL
22	USE THE NET EXERCISE THAT DUANE TALKED ABOUT, AND
23	SO YOU FLIP THE WARRANT IMMEDIATELY. YOU SAY HERE
24	IS YOUR WARRANT, BOOM. THANK YOU. NOW GIVE ME MY
25	SHARE CERTIFICATE, AND I'M IMMEDIATELY GOING TO
	04

84

1	SELL THOSE SHARES FOR THE MOST PART. SO THE BANKS
2	AREN'T SUPPOSED TO BE HOLDING STOCK. THE BANKS
3	DON'T HOLD THE STOCK. THEY'LL TURN IT IMMEDIATELY.
4	NOW, THE QUESTION IS CAN A STATE AGENCY,
5	CAN IT HAVE A WARRANT? I DON'T KNOW THE ANSWER TO
6	THAT.
7	MR. KLEIN: THE LEGAL OPINION FROM BOARD
8	COUNSEL IS WE CAN HOLD WARRANTS, BUT WE CAN NEVER
9	OWN THE STOCK. SO WE'D HAVE TO HAVE AN ESCROW
10	TRANSACTION WHERE BEFORE THE STOCK WAS DELIVERED,
11	WE WERE OUT OF THE TRANSACTION.
12	MR. HALE: WE FLIP IT IMMEDIATELY. SO,
13	IN FACT, WE'D NEVER HOLD THAT SHARE CERTIFICATE.
14	WE'D SAY WE'RE EXERCISING AND WE'RE SELLING, BOOM,
15	BOOM.
16	MR. SHEEHY: CAN I ASK HOW WE MIGHT
17	FACTOR THAT IN IN THE DECISION WHEN WE'RE LOOKING
18	AT WARRANT COVERAGE? WHAT PERCENTAGE WE WANT TO
19	HAVE BECAUSE THE FACT THAT WE ARE GOING TO HAVE TO
20	FLIP IT IMMEDIATELY MAY MAKE DOES THAT MOTIVATE
21	US TO SEEK HIGHER COVERAGE, OR DOES THAT HAVE ANY
22	FACTOR? IS THAT A FACTOR AT ALL?
23	MR. KLEIN: YOU DON'T MEAN IMMEDIATELY
24	WHEN YOU MAKE THE LOAN.
25	MR. SHEEHY: NO. BUT OBVIOUSLY, IF YOU
	85

1	GOT A WARRANT TO BUY GOOGLE AT POINT 1, IT WOULD BE
2	WORTH A LOT. AT POINT 2 DOWN THE ROAD, IT'D BE
3	WORTH A LOT MORE. HOLDING A WARRANT AND BEING ABLE
4	TO EXERCISE THAT AT DIFFERENT POINTS IN THE
5	COMPANY'S SUCCESS, IT COULD MEAN VASTLY DIFFERENT
6	AMOUNTS OF MONEY.
7	CHAIRMAN ROTH: YOU CAN HOLD THE WARRANT.
8	MR. SHEEHY: I'M JUST ASKING JUST THE
9	MECHANICS OF OUR CALCULATIONS AS WE TRY TO FIGURE
10	OUT WHAT NUMBERS WE'RE USING, IF THIS IS SOMETHING
11	WE SHOULD BE CONSIDERING.
12	CHAIRMAN ROTH: I DON'T THINK IT HAS ANY
13	IMPACT ON THAT PARTICULAR THING, JEFF, BUT HOLDING
14	THE WARRANT IS UP TO WHOEVER IS MANAGING THE
15	PORTFOLIO TO SAY WE'RE GOING TO SELL THE WARRANT AT
16	THIS POINT IN TIME.
17	NOW, ANOTHER QUESTION RELATED HERE, JOHN,
18	IS WHAT DO YOU DO IN THE EVENT THAT THERE'S REALLY
19	NO PUBLIC MARKET FOR IT AND THERE'S NO M&A VALUE,
20	OR EVEN IF THERE IS M&A WHERE YOU HAVE TWO
21	COMPANIES MERGING, WHAT IS THE WARRANT PREMIUM THAT
22	WE COULD ASK FOR IN THAT TRANSACTION SO THEY COULD
23	BUY OUT.
24	MR. HALE: THERE ARE OPPORTUNITIES. THE
25	CONCERN IS, AND THE BANKS HAVE THE SAME CONCERN,
	86

1	YOU DON'T WANT TO TURN THE WARRANT INTO PRIVATE
2	COMPANY STOCK BECAUSE IT'S ILL-LIQUID. WE WON'T BE
3	ABLE TO FIND A BUYER FOR THE PRIVATE COMPANY STOCK.
4	SO IN MANY DEALS THE LENDERS OR THE HOLDERS OF THE
5	WARRANT ARE PUTTING A PROVISION INTO THE WARRANT
6	THAT SAYS AFTER A CERTAIN NUMBER OF YEARS, CALL IT
7	THE END OF THE TERM, IF AFTER TEN YEARS NOTHING HAS
8	HAPPENED, WE CAN PUT THIS WARRANT BACK TO THE
9	COMPANY. COMPANY, YOU BUY THIS WARRANT BACK FROM
10	US FOR X DOLLARS. AND WHAT DOLLAR THAT IS, THAT'S
11	THE HORSE TRADE. YOU DECIDE AT THE TIME. OFTEN
12	PEOPLE ARE SAYING I WANT A PERCENTAGE. IT'S THAT I
13	WANT TO GET A SURE RETURN. I WANT TO GET 100 FOR
14	MY INVESTMENT OVER THE TEN YEARS. BOOM. THAT'S
15	THE \$100, THE PUT. GENERALLY IT'S GOING TO BE A
16	LITTLE BIT HIGHER NUMBER THAN THAT.
17	NOW, THE COMPANIES, PARTICULARLY THE
18	REALLY NEW COMPANIES, ARE GOING TO BE RELUCTANT TO
19	LET US HAVE THAT PUT RIGHT EXCEPT EXERCISED WAY IN
20	THE FUTURE BECAUSE THEY DON'T HAVE THE MONEY.
21	THAT'S WHY WE'RE HERE. THE LAST THING THEIR
22	INVESTORS WANT TO SEE THEM DO IS TAKE A CHUNK OF
23	THEIR MONEY AND BUY US OUT. AS YOU SAY, DUANE,
24	RIGHT AT THE END OF THE TERM, ESPECIALLY IF WE'RE
25	TALKING TEN YEARS WHEN THE COMPANY IS LIQUID,
	87

87

1	THAT'S GOING TO HAVE A FAR LESS DRASTIC EFFECT ON
2	THE COMPANY, NEGATIVE IN TERMS OF THEIR CASH FLOW,
3	THAN IF WE HAD THAT RIGHT RIGHT UP FRONT.
4	DR. LOVE: CAN I ASK ABOUT THE WARRANT
5	COVERAGE? ARE WE ENVISIONING THAT BEING AT SOME
6	POINT OF AGREEMENT OF HOW THAT GETS PRICED? IS IT
7	SOME PERCENT, 20 PERCENT OR SO ABOVE THE LAST ROUND
8	OR THE NEXT ROUND?
9	AND THE OTHER IS QUESTION ARE WE
10	ENVISIONING IT BEING ON COMMON OR PREFERRED SHARES
11	IN TERMS OF PRICE?
12	MR. HALE: SO IF WE'RE TALKING ABOUT THE
13	BRAND NEW COMPANIES, THEY'RE GOING TO HAVE BUT ONE
14	CLASS OF STOCK. THEY'LL ONLY HAVE COMMON. THE
15	PREFERRED ONLY COMES INTO PLAY TYPICALLY WHEN THE
16	VENTURES GUYS GO INTO THE COMPANY. AND AT THAT
17	POINT THE VENTURE GUYS SAY, OKAY, SERIES A BECAUSE
18	WE WANT TO HAVE THE DIFFERENT RIGHTS AND
19	PREFERENCES THAT A COMPANY, A PREFERRED STOCK, HAS
20	AGAINST THE COMMON. BUT WHEN WE'RE TALKING WITH
21	THE ACADEMICS AND THE FOUNDERS, THEY'RE JUST
22	STARTING OUT, THERE'S GOING TO BE JUST THE ONE
23	SERIES, AND THAT'S WHAT WE'LL BE GETTING.
24	IN TERMS OF PRICING, MY TAKE WOULD BE
25	NORMALLY YOU WOULD WANT TO TAKE THE FAIR MARKET
	88

1	VALUE OF THE STOCK. MAKES SENSE. IF THEY ISSUED
2	THE SHARES TO THEIR EMPLOYEES YESTERDAY AT A PENNY
3	A SHARE OR TO THEMSELVES AT A PENNY A SHARE, THAT'S
4	WHAT THE FAIR MARKET VALUE IS.
5	DR. LOVE: NO PREMIUM AT ALL.
6	CHAIRMAN ROTH: IN THAT CASE THERE WOULD
7	BE NONE. IF THEY'VE ALREADY DONE A FRIENDS AND
8	FAMILY ROUND AND THE POST MONEY IS A MILLION
9	DOLLARS, THAT TELLS YOU WHAT THE VALUE OF THE
10	COMPANY IS AT THE LAST FINANCING. IF YOU MAKE A
11	MILLION-DOLLAR LOAN AND YOU GET A 100-PERCENT
12	WARRANT COVERAGE, YOU COME IN AT PAR WITH THEM
13	BASICALLY.
14	BUT IT'S I AGREE WITH JOHN, THAT
15	FIGURING OUT THE VALUE IS NOT GOING TO BE THAT
16	DIFFICULT. THE PUBLIC COMPANIES, OBVIOUSLY IT'S
17	FAIR MARKET VALUE, BUT THE PRIVATE COMPANIES, YOU
18	GO TO THEIR LAST FINANCING AND YOU DETERMINE WHAT
19	THE VALUE WAS PLACED ON THE COMPANY AT THAT POINT,
20	AND THAT ENTITLES YOU TO THE WARRANT COVERAGE.
21	DR. LOVE: THAT'S SIMPLE.
22	CHAIRMAN ROTH: IT'S EASY TO MONITOR AND
23	EASY TO MANAGE.
24	BUT BACK TO THE PRINCIPALS HERE. WE HAVE
25	A RECOURSE LOAN WITH A SMALL WARRANT COVERAGE, AND
	89

1	WE HAVE A NONRECOURSE LOAN WITH A LARGE WARRANT
2	COVERAGE. AND THE WARRANT COVERAGE IS BASED ON THE
3	AMOUNT OF THE LOAN SO THAT YOU END UP I DID A
4	SIMPLE EXAMPLE. IF THERE WAS A \$3 MILLION
5	VALUATION ON A COMPANY THAT CAME TO US, AND THEY
6	ISSUED A HUNDRED THOUSAND SHARES THAT WAS \$30 PER
7	SHARE THAT THEY ISSUED IT, AND IF WE MADE A $\$1$
8	MILLION LOAN AND TOOK 50-PERCENT WARRANT COVERAGE,
9	WE WOULD HAVE THE RIGHT TO 16,667 WARRANTS OR 16
10	PERCENT OF THE COMPANY. ASSUMING THERE WAS A VALUE
11	THERE, WE COULD OWN THAT, IF WE HAD A STRIKE PRICE
12	OF \$30 A SHARE, SAME AS THEY DID THEIR LAST ROUND.
13	SO THAT GIVES YOU SOME IDEA. BUT, AGAIN,
14	THOSE WARRANTS ARE WORTHLESS UNLESS THERE'S AN
15	INCREASE IN THE VALUE OF THE COMPANY FROM THE TIME
16	WE COME IN. WE CAME IN HERE. WE DON'T HAVE A
17	PIECE OF THE COMPANY. WE HAVE THE RIGHT TO BUY A
18	PIECE OF THE COMPANY AT THE FAIR MARKET VALUE.
19	THEN IF IT APPRECIATES OVER THE TEN YEARS, JEFF,
20	LIKE YOU WERE GETTING AT, THAT'S WHEN WE HAVE TO
21	DECIDE, WHEN WE'RE SELLERS, IF THERE'S AN
22	OPPORTUNITY TO DO THAT AND BRING THAT BACK INTO
23	CIRM.
24	MR. SHEEHY: HOW WOULD WE MAKE THAT
25	DECISION?
	90

90

1	CHAIRMAN ROTH: I THINK IT SHOULD BE A
2	FIXED NUMBER. GENERALLY YOU CAN SET THESE AND THEY
3	CAN BE ADJUSTED AS WE GO. RIGHT NOW IF I HAD TO
4	RECOMMEND THAT WE COULD CONSIDER 50-PERCENT WARRANT
5	COVERAGE ON PRODUCT LOANS AND 20 PERCENT, I CAN BE
6	PERSUADED, 10 TO 20 PERCENT ON COMPANY LOANS ON
7	PRODUCTS AS WARRANT COVERAGE. THAT WORKS FROM
8	LARGE PUBLIC COMPANIES ALL THE WAY DOWN TO
9	START-UPS. AND IT KEEPS IT VERY BECAUSE YOU'RE
10	DOING IT ON THE AMOUNT OF MONEY YOU'RE LOANING, NOT
11	ON THE TOTAL VALUE OF THE COMPANY. MICHAEL.
12	DR. GOLDBERG: I AGREE WITH THAT.
13	CHAIRMAN ROTH: ANY OTHER COMMENTS FROM
14	THE BOARD BEFORE WE GO TO THE PUBLIC?
15	MR. SHEEHY: DO WE GET A DEGREE? DO I
16	GET AN MBA AFTER THIS?
17	CHAIRMAN ROTH: YES. PUBLIC COMMENTS?
18	MR. EARP: A QUESTION ABOUT THE FORCED
19	PUT ON THE WARRANT COVERAGE IN THE SITUATION WHERE
20	WE'RE TALKING ABOUT A NONRECOURSE LOAN. THE PLAN,
21	IF I UNDERSTAND IT CORRECTLY, BEHIND THE
22	NONRECOURSE LOAN IS THE RISK IS BORNE ON THE
23	PROJECT. SO IF THE FUNDED PROJECT FAILS IN
24	CLINICAL TRIALS, THE COMPANY DOESN'T PAY BACK, AND,
25	YOU KNOW, CIRM IS GOING TO RECOGNIZE THAT IT WILL
	91

1	LOSE A CERTAIN NUMBER OF ITS INVESTMENTS BECAUSE OF
2	CLINICAL TRIAL FAILURES, FOR EXAMPLE. BUT THEN
3	DOES IT MAKE SENSE THAT YOU HAVE A FORCED PUT ON
4	THE WARRANT COVERAGE FOR THAT LOAN FOR THE COMPANY
5	BECAUSE THE FUNDED PROJECT, WHICH, AGAIN, WAS A
6	NONRECOURSE LOAN HAS FAILED, THE COMPANY TRIED, IT
7	DID ITS BEST, IT PUT SOME MATCHING FUNDING AND THE
8	PRODUCT FAILED, BUT NOW YOU'RE GOING BACK TO THE
9	COMPANY AND DEMANDING IT PAY TURN OVER I MEAN
10	IF YOU'RE GOING TO FORCE PUT A CASHLESS EXERCISE,
11	YOU'RE GOING TO GO BACK TO THE COMPANY AND SAY, NOW
12	WE WANT, BASED ON OTHER PROJECTS WHICH WE, CIRM,
13	HAVE NOTHING TO DO WITH FUNDING, BASED ON THE
14	SUCCESS OF THOSE OTHER PROJECTS, WE WANT SOME
15	CAPITAL COMING BACK OUT OF THE COMPANY.
16	CHAIRMAN ROTH: DAVID, THAT REALLY, IN MY
17	OPINION, ADDRESSES THE RISK WE'RE TAKING BECAUSE IF
18	THE PRODUCT FAILS, WE'RE WITH YOU, IF THE PRODUCT
19	FAILS, WE GET NOTHING EXCEPT THE WARRANTS. SO WE
20	FUNDED ALL OF THIS AND ALL WE'RE LEFT WITH IS
21	WARRANTS. WE'RE NOT GETTING THE LOAN REPAID.
22	WE'RE NOT GETTING THE INTEREST, JUST THE WARRANTS.
23	AND ON THE OTHER SIDE, YOU AGREE TO PAY FOR IT, BUT
24	YOU'RE NOT GIVING US MUCH OF ANY WARRANTS.
25	MR. EARP: THEN YOU MUST HAVE A VERY
	92

1	DIFFERENT SITUATION IF YOU'RE FUNDING A COMPANY
2	THAT HAS FIVE OR SIX OTHER PROGRAMS THAT IT'S
3	FUNDING OF ITS OWN BAT VERSUS YOU'RE PUTTING A
4	NONRECOURSE LOAN INTO A SINGLE PRODUCT COMPANY
5	BECAUSE THE RISK THAT YOU'RE TAKING ON CIRM'S PART
6	IS VERY DIFFERENT IN THOSE TWO SITUATIONS. SO DOES
7	IT MAKE SENSE FOR THERE TO BE THE SAME WARRANT
8	COVERAGE IN THOSE TWO SITUATIONS WHERE YOU'RE
9	LIKELY TO GET NOTHING OUT OF ONE COMPANY IF THE
10	PRODUCT FAILS; WHEREAS, IN THE OTHER COMPANY,
11	BECAUSE OF THE COMPANY'S OWN INVESTMENT IN ITS
12	OTHER PROGRAMS, YOU'RE GOING TO REAP A SUBSTANTIAL
13	RETURN.
14	CHAIRMAN ROTH: I THINK IT'S VERY FAIR
15	WHEN YOU THINK THROUGH IT, THAT YOU'RE COMING TO US
16	WANTING US TO TAKE THE RISK, GIVE THE LOAN; AND IF
17	THE PRODUCT NEVER WORKS, FORGET IT AND FORGET THE
18	WARRANTS TOO?
19	MR. EARP: NO. I TAKE THAT POINT, BUT
20	WHAT I'M SAYING IS THE RISK THAT CIRM IS TAKING CAN
21	BE COMPLETELY DIFFERENT BASED ON THE TYPE OF
22	COMPANY THAT IT'S FUNDING BECAUSE IN A SINGLE
23	PRODUCT OPPORTUNITY COMPANY WHERE THE CIRM MONEY IS
24	ONLY GOING TO PRODUCT AND THAT PRODUCT FAILS, THE
25	WARRANTS ARE GOING TO BE WORTH NOTHING BECAUSE
	93

1	THERE IS NOTHING ELSE IN THE COMPANY FOR YOU TO
2	EXERCISE WARRANTS AGAINST.
3	IN ANOTHER SITUATION WHERE THE COMPANY
4	HAS MULTIPLE OTHER PROJECTS RUNNING, THE WARRANTS
5	ARE GOING TO HAVE REAL VALUE BASED ON THE OTHER
6	PROJECTS THAT THE COMPANY HAS GOING THAT HAS
7	NOTHING TO DO WITH CIRM.
8	CHAIRMAN ROTH: OUR PREFERENCE WOULD BE
9	THAT THOSE COMPANIES WOULD TAKE THE RECOURSE LOAN
10	AND NOT WORRY ABOUT IF THEY BELIEVE IN THE
11	PRODUCT AND THEY DON'T WANT TO GIVE THE WARRANTS
12	UP, TAKE THE RECOURSE LOAN, AND THAT'S WHAT I HOPE
13	THEY WOULD DO.
14	MR. EARP: BUT YOU WOULDN'T PRICE THE
15	WARRANTS OR YOU WOULDN'T ASK FOR DIFFERENT WARRANT
16	COVERAGE BASED ON DIFFERENT RISK?
17	CHAIRMAN ROTH: I DON'T KNOW HOW WE'D
18	ADMINISTER THAT. WHO ARE WE GOING TO HIRE TO
19	NEGOTIATE PERSON BY PERSON, APPLICATION BY
20	APPLICATION? WHEN THIS IS VERY SIMPLE. IT SAYS IF
21	YOU'RE BORROWING THREE MILLION, THE WARRANT
22	COVERAGE IS 50 PERCENT, AND YOU CAN CALCULATE IT IN
23	A COMPANY OF ANY SIZE. THIS IS STILL A TRIVIAL
24	AMOUNT. AND, AGAIN, IT'S A WARRANT AT FAIR MARKET
25	VALUE. IT'S NOT
	24

94

1	MR. KLEIN: DUANE, FROM A FINANCING POINT
2	OF VIEW, I DON'T REALLY UNDERSTAND THAT. IF IT'S A
3	PRODUCT LOAN, IT'S A PRODUCT LOAN. IF WE SAY THAT
4	THE WARRANT IS GOING TO BE A PUT, IT'S NOT A
5	PRODUCT LOAN. IT'S A COMPANY LOAN. SO I DON'T
6	UNDERSTAND HOW WE COULD DO THAT. IF WE'RE GOING TO
7	HAVE THE 50 PERCENT OF THE AMOUNT OF THE LOAN AS
8	WARRANTS, AND IF THERE'S A PUT, THERE'S A
9	CONTINGENT LIABILITY ON THE COMPANY THAT'S GOING TO
10	DEFEAT WHAT WE'RE TRYING TO DO HERE. SO WE'RE
11	TRYING TO GET COMPANIES, INCLUDING COMPANIES THAT
12	MAY BE REASONABLY ESTABLISHED COMPANIES, BUT ARE
13	TRYING TO GET INTO THE STEM CELL AREA AND SEE
14	TREMENDOUS BARRIERS MOVING INTO TRIALS IN THE STEM
15	CELL AREA BECAUSE OF THE DIFFICULTY OF RAISING
16	MONEY IN THIS NEW FRONTIER. AND WE DON'T WANT TO
17	CREATE A CONTINGENT LIABILITY DISINCENTIVE, SO I
18	HAVE A PROBLEM WITH THE PUT ON THE WARRANTS ON A
19	PRODUCT LOAN WHERE WE HAVE THAT LEVEL OF WARRANTS.
20	CHAIRMAN ROTH: I WOULD CHALLENGE YOU TO
21	SHOW ME THAT LEVEL OF WARRANTS IS MEANINGFUL TO A
22	COMPANY OF THAT SIZE. IF YOU DO THE CALCULATION,
23	YOU WILL SEE IT'S FIVE IF IT'S A MILLION
24	DOLLARS, IT'S \$500,000 WORTH OF WARRANTS AT FAIR
25	MARKET.

1	MR. KLEIN: IF IT'S A MILLION DOLLARS,
2	THAT'S NOT THE ISSUE. I MEAN THERE ARE SOME MAJOR
3	TRIALS THAT THE INDUSTRY KNOWS ARE FAIRLY CLOSE TO
4	FDA APPROVAL. THE PROBLEM IS HOW IN THE WORLD DO
5	YOU RAISE THE MONEY? SO THE COMPANIES HAVE A LOT
6	OF MONEY INVESTED, THEY HAVE SOME MONEY, BUT IT'S
7	PRETTY PREDICTABLE, LOOKING AT THE COLLAPSE OF THE
8	AVAILABLE MONEY IN THE FIELD, THAT THEY'RE GOING TO
9	HAVE REAL TROUBLE RAISING THE MONEY THEY NEED TO
10	GET THROUGH PHASE II.
11	AND SO THE ISSUE IS IF YOU HAVE
12	SIGNIFICANT DOLLARS, AND WE'RE TRYING TO GET
13	BREAKTHROUGHS FUNDED, THE LEAD PRODUCTS HAVE A
14	TREMENDOUS VALUE FOR US IN OUR MISSION. AND IF
15	WE'RE GOING TO GET INTO THAT AREA, THE ISSUE IS
16	GIVING THEM A TRUE CHOICE BETWEEN A PRODUCT LOAN
17	AND A COMPANY LOAN.
18	CHAIRMAN ROTH: WHY WOULD ANYBODY TAKE
19	ANYTHING OTHER THAN A PRODUCT LOAN IN YOUR
20	SCENARIO?
21	MR. KLEIN: WELL, IN A PRODUCT LOAN, IF
22	THEY HAVE TO HAVE MAJOR MATCHING FUNDS.
23	CHAIRMAN ROTH: NOW YOU'RE ADDING THINGS
24	TO IT.
25	MR. KLEIN: I'VE BEEN ON THE MATCHING
	96

1 FUNDS FROM THE BEGINNING.

2 CHAIRMAN ROTH: SINCE THE BEGINNING TODAY 3 YOU'VE BEEN ON THAT. I'M JUST SAYING YOU CAN'T 4 KEEP THROWING THESE THINGS ON TOP OF EACH OTHER. 5 IF WE'RE GOING TO HAVE MATCHING FUNDS AND IT'S 6 GOING TO BE TIED TO WARRANTS AND IT'S GOING TO BE TIED TO PUTS, WE'RE GOING TO BE HERE TILL FIVE 7 8 YEARS FROM NOW TRYING TO WRITE THIS POLICY. IT'S 9 GOT TO BE VERY SIMPLE.

10 MR. KLEIN: IT'S VERY SIMPLE. ON LARGER 11 LOANS, IF YOU HAVE A MATCHING FUND REQUIREMENT, AND 12 YOU HAVE SIGNIFICANT WARRANTS, IF IT'S PRODUCT, YOU 13 DON'T HAVE A PUT. YOU COULD HAVE A VERY SIMPLE 14 PROGRAM. LARGE LOANS REQUIRE MATCHING. AND WITH 15 LARGE LOANS AND MATCHING, THE WARRANTS WOULDN'T 16 HAVE A PUT. THAT'S A SIMPLE, UNDERSTANDABLE 17 PROGRAM.

18 CHAIRMAN ROTH: JOHN, DO YOU WANT TO TALK 19 ABOUT THE PUT AGAIN? I WANT TO UNDERSTAND THAT 20 BECAUSE I WASN'T SURE. WHAT HE'S SUGGESTING IS AT 21 THE END OF THE LIFE OF THE WARRANT, IF THERE'S NO 22 MARKET FOR IT --23 MR. HALE: THERE'S ALL DIFFERENT WAYS TO 24 WRITE THIS THING, BUT THAT'S OFTEN WHERE PEOPLE 25 WANT TO BE. IF AT THE END OF THE TEN-YEAR TERM

97

1	THERE'S STILL HASN'T BEEN A LIQUIDITY EVENT, THE
2	LENDER HASN'T BEEN ABLE TO GET OUT, LOOK, RATHER
3	THAN THROWING THIS IN THE GARBAGE CAN, I WANT TO
4	PUT IT BACK TO YOU, COMPANY. I WANT YOU TO BUY IT
5	FROM ME FOR X. THAT WOULD BE THE MECHANICS OF IT.
6	MR. KLEIN: SO THEY'RE AT THE VERGE OF A
7	PHASE III AT THE END OF THAT OR THEY'RE IN THE
8	MIDDLE OF PHASE III, THEY CAN'T DO IT.
9	MR. HALE: THEY WOULDN'T HAVE THE MONEY.
10	THE QUESTION IS THE LOAN WOULD BE GOING TO THE TEN
11	YEARS. NOW, LOOK, THERE'S ALL SORTS OF WAYS TO
12	DEAL WITH THAT. IF YOU BUY INTO THE NOTION THAT
13	IT'S OKAY TO HAVE THE PUT, AND THE COMPANY DOESN'T
14	YET HAVE THE MONEY TO DO THAT, YOU SIMPLY EXTEND
15	THE TERM OF THE PUT.
16	CHAIRMAN ROTH: YOU CAN EXTEND THE
17	WARRANT. YOU CAN DO SOME THINGS THERE, BUT JUST TO
18	LET IT EXPIRE WORTHLESS TO ME SEEMS LIKE WE
19	WOULDN'T BE DOING OUR FIDUCIARY TO TRY TO COLLECT
20	ON THAT.
21	MR. SHEEHY: TEN YEARS AT THAT STAGE. I
22	MEAN TEN YEARS IS ONE TO THREE. YOU'RE TALKING
23	ABOUT A LARGE LOAN FOR PHASE II.
24	MR. KLEIN: IT'S GOING TO TAKE YEARS TO
25	RUN THROUGH THE MILESTONES.
	98

1	MR. SHEEHY: YOU'RE TALKING ABOUT A VERY
2	LARGE LOAN AT THIS POINT, BOB. YOU'RE TALKING
3	ABOUT A LARGE LOAN FOR A LATER STAGE CLINICAL
4	TRIAL. WE HAVE A TEN-YEAR TERM.
5	MR. KLEIN: NO. NO. MILESTONES COULD
6	BE WE HAVE DISEASE TEAM GRANTS COMING UP. YOU
7	COULD HAVE PRECLINICAL IND, PHASE I, PHASE II.
8	MR. SHEEHY: THEY ALSO HAVE THE OPTION OF
9	A GRANT, SO THEY HAVE A RECOURSE LOAN, A
10	NONRECOURSE LOAN, AND A GRANT. WE'RE GIVING THEM A
11	FAIRLY ELABORATE MENU, ONE OF WHICH THEY DON'T HAVE
12	TO PAY BACK AT ALL.
13	MR. KLEIN: WHY WOULD I WANT TO GIVE THEM
14	THAT OPTION? IF, IN FACT, IT'S A LARGE AMOUNT OF
15	MONEY, WHY WOULDN'T I WANT TO HAVE A LOAN?
16	MR. SHEEHY: WELL, I DIDN'T REALIZE THAT
17	WE WERE GOING TO DISCRIMINATE ON THE BASIS I
18	THOUGHT THAT ALL OPTIONS WERE GOING TO BE AVAILABLE
19	WITHIN THE CONTEXT OF THIS PROGRAM, ESPECIALLY ON
20	SOMETHING LIKE A DISEASE TEAM THAT WE DON'T
21	ANTICIPATE ANY PLAYER IN THE DISEASE TEAM MAKING A
22	SIGNIFICANT ADVANCE WITHOUT SOME INVOLVEMENT OF
23	INDUSTRY. SO WE'RE NOT GOING TO BE ABLE TO SAY
24	THAT NO INDUSTRY PLAYER IS GOING TO BE ABLE TO GET
25	A GRANT WITHIN THE DISEASE TEAM SCHEME.
	99

1	I'VE LOOKED AT THE DISEASE TEAM
2	OFFERINGS, AND MANY OF THEM ARE ASKING FOR GRANTS,
3	AND THEY'RE ASKING FOR GRANTS. THESE ARE THE
4	INITIAL THINGS, BUT THEY'RE ASKING FOR GRANTS AND
5	MANY, MANY TIMES WITH ACADEMIC PARTNERS. SO I
6	DON'T THINK WE WANT TO GO BACK AND TELL THEM THAT
7	THEY CAN'T HAVE A GRANT IF THEY SUCCEED WITH THEIR
8	DISEASE TEAM BECAUSE WE'D RATHER THEY HAD A LOAN.
9	I GUESS WE'RE GETTING KIND OF MIXED UP BECAUSE WHAT
10	IS REALLY OUR MISSION IS TO ADVANCE THERAPIES. IF
11	SOMEBODY GETS A THERAPY OUT THERE, WE'VE SUCCEEDED
12	WHETHER WE HAD A GRANT, A LOAN, WHETHER WE GOT PAID
13	BACK OR NOT.
14	BUT IF WE'RE GOING TO MAKE LOANS, I THINK
15	DUANE IS RIGHT. WE SHOULD GET PAID BACK AND IT
16	SHOULD BE SIMPLE BECAUSE WE STILL HAVE THE GRANT
17	PROCESS OUT THERE THAT WILL BE AVAILABLE IN MANY
18	CIRCUMSTANCES. YOU KNOW, I DON'T KNOW WHY WE HAVE
19	TO FIGURE OUT ANOTHER WAY TO GIVE AWAY MONEY WHEN
20	WE HAVE A WAY TO GIVE AWAY MONEY. THIS IS NOT
21	ABOUT GIVING AWAY MONEY. THIS IS ABOUT GETTING
22	MONEY BACK, WHICH IS WHAT I UNDERSTOOD THIS PROGRAM
23	TO BE.
24	MR. KLEIN: IT'S A LOAN PROGRAM. IF THE
25	PRODUCT WORKS, NOT ONLY DO YOU GET THE INTEREST
	100

-	
1	BACK, YOU HAVE A BIG INTEREST RATE RISK PREMIUM IN
2	THE WARRANTS. AND THE ISSUE IS IF YOU'RE PRICING A
3	50-PERCENT WARRANT, IF YOU'RE PRICING 50 PERCENT OF
4	THE LOAN AMOUNT AS WARRANTS BECAUSE YOU'RE GETTING
5	A RISK PREMIUM AND BECAUSE IT'S NOT A COMPANY LOAN,
6	IF YOU HAVE A PUT, IT IS A COMPANY LOAN. SO YOU
7	GOT A COMPANY LOAN
8	CHAIRMAN ROTH: THE WARRANTS ARE
9	ABSOLUTELY ON THE COMPANY, AND THE CONCEPT WAS THAT
10	WE GET THE WARRANTS AS SORT OF THE UPSIDE ON THE
11	SUCCESS OF THE COMPANY, BUT WE'RE PUTTING MONEY ON
12	THE LOAN AND THEY CAN CHOOSE RECOURSE OR
13	NONRECOURSE.
14	MR. EARP: IF THERE'S A PUT ON THE
15	WARRANTS, THEN ANY COMPANY IS GOING TO HAVE TO
16	RECORD THAT AS AN OBLIGATION. IN ITS FINANCIAL
17	STATEMENTS, IT WILL ALWAYS BE RECORDED AS AN
18	OBLIGATION. SO ANY TIME ANY COMPANY, A SMALL
19	START-UP COMPANY GOES TO TRY TO RAISE ITS NEXT
20	ROUND OF FUNDS, WHOEVER IS GOING TO COME AND LOOK
21	AT THOSE FUNDS IS GOING TO SAY, OKAY, BUT YOU'VE
22	ALREADY GOT 100,000 OR A MILLION DOLLARS OR
23	WHATEVER IT IS OF PUT WARRANT COVERAGE HERE. YOU
24	HAVE THAT OBLIGATION ON YOUR BOOKS, AND YOU'RE
25	GOING TO BE HANDICAPPING THOSE COMPANIES WHEN THEY
	101

1	GO OUT AND TRY TO RAISE FURTHER FUNDS BECAUSE OF
2	WHAT WILL ESSENTIALLY BE SEEN AS A DEBT OBLIGATION
3	ON ITS BOOKS.
4	CHAIRMAN ROTH: IN THE FORM OF A PRIVATE
5	COMPANY IS WHAT YOU'RE TALKING ABOUT? PUBLIC
6	COMPANY WE'VE GOT A MARKET.
7	MR. EARP: IF THERE'S A PUT ON THOSE
8	WARRANTS
9	CHAIRMAN ROTH: WE'RE TALKING ABOUT A
10	COMPANY THAT HAS NO MARKET SHARE, CAN'T TRADE
11	STOCK, IT'S ILL-LIQUID.
12	MR. EARP: WE'RE TALKING ABOUT ANY
13	COMPANY THAT'S IN BUSINESS. IF THERE'S A PUT ON
14	THE WARRANTS, YOU, CIRM, HAVE THE RIGHT TO COME AND
15	DEMAND THAT MONEY. THEN IT'S GOING TO BE RECORDED
16	ON THE FINANCIAL STATEMENTS.
17	CHAIRMAN ROTH: JOHN, JUST SO WE CAN
18	CLARIFY THIS. I HAD NO CONCEPT OF A PUT BEING
19	ASSOCIATED WITH A PUBLIC COMPANY. WE HAVE A FAIR
20	MARKET VALUE. THE PUT WOULD NEVER GO THERE. WE
21	CAN DECIDE AT ANY POINT IN THAT TEN YEARS THAT WE
22	HAVE RIGHTS TO EXERCISE AND SELL IN THE CASHLESS
23	EXERCISE.
24	PRIVATE COMPANIES IS WHAT WE'RE TALKING
25	ABOUT, NOT PUBLIC COMPANIES, WHERE THERE'S NO
	102

1	MARKET, NOTHING, AND WE'RE AT THE END OF THE TEN
2	YEARS, AND THE WARRANTS THAT ARE ABOUT TO EXPIRE
3	ARE WORTHLESS. SO THE QUESTION IS CAN WE GET
4	SOMETHING FOR THAT OR SHOULD WE? IF WE'RE DOING
5	OUR FIDUCIARY RESPONSIBILITY HERE, SHOULD WE PUT
6	TERMS IN THERE THAT SAY WE HAVE THE RIGHT TO GET
7	THAT FROM A PRIVATE COMPANY, NOT A PUBLIC?
8	MR. HALE: JUST IN TERMS OF THE PUBLIC
9	COMPANY, AN EASY WAY TO FIX THAT IS TO HAVE THE PUT
10	RIGHT EXPIRE WHEN THE COMPANY GOES PUBLIC. SO IT'S
11	THE TERM OF THE PUT IS REALLY THE SHORTER OF THE
12	TEN YEARS, THE LIFE OF THE WARRANT, OR WHEN THE
13	COMPANY GOES PUBLIC, SO IT WON'T BE THERE ANYMORE.
14	IT'S TRUE AS I'M NOT AN ACCOUNTANT, SO I DON'T
15	KNOW THESE THINGS, BUT I THINK THAT'S PROBABLY
16	RIGHT, IT WOULD BE A CONTINGENT LIABILITY ON THE
17	BOOKS OF THE PRIVATE COMPANY.
18	CHAIRMAN ROTH: AGAIN, THE CONCEPT OF
19	MAKING A LOAN TO AN ALREADY PUBLIC COMPANY IS WHAT
20	WE'RE TALKING ABOUT.
21	MR. HALE: NONISSUE.
22	CHAIRMAN ROTH: THERE IS NOT GOING TO BE
23	A PUT.
24	MR. HALE: RIGHT. RIGHT.
25	CHAIRMAN ROTH: THE PUT, JUST SO WE'RE
	103

1	PERFECTLY CLEAR, ONLY COMES ON A PRIVATE COMPANY
2	WHO'S ILL-LIQUID AND IT'S ABOUT TO EXPIRE, PERIOD.
3	OKAY. ANY OTHER THOUGHTS OR COMMENTS ON
4	WARRANTS? WE HAVE SOME PUBLIC COMMENT.
5	MR. SIMPSON: JOHN SIMPSON FROM THE
6	FOUNDATION FOR TAXPAYER AND CONSUMER RIGHTS. VERY
7	QUICKLY, HAVE WE DONE ADEQUATE DUE DILIGENCE TO
8	WHAT STATE AGENCIES ARE ALLOWED TO OWN IN TERMS OF
9	EQUITY AND WARRANTS? I KNOW WE CAN'T DO
10	STRAIGHT-UP STOCK EQUITY, BUT CLEARED ON WARRANTS?
11	OR IS THAT STILL BEING CHECKED INTO?
12	MR. KLEIN: OUR BOARD COUNSEL, JAMES
13	HARRISON, INDICATED THAT WARRANTS WERE PERMITTED,
14	BUT WE CAN'T OWN STOCK. DO YOU HAVE ANY
15	INDEPENDENT RESEARCH, TAMAR, THAT YOU WANT TO
16	COMMENT ON?
17	MS. PACHTER: NO, I HAVE NOT RESEARCHED
18	THIS.
19	CHAIRMAN ROTH: JOHN, THE CONCEPT WE HAVE
20	HERE IS THAT WE'LL NEVER HOLD THE STOCK. THE
21	WARRANT WILL BE EXERCISED
22	MR. SIMPSON: IN A CASHLESS.
23	CHAIRMAN ROTH: CASHLESS AND IT'S
24	INSTANTANEOUS. I THINK THAT ADDRESSES THAT WE
25	UNDERSTAND THAT WE CAN'T OWN THE STOCK, BUT WE CAN
	104

1	DO THE PROCEDURE THAT TURNS THAT INTO A LIQUID
2	ASSET.
3	MR. SIMPSON: I BELIEVE THAT THERE IS
4	SOME MECHANISM, BUT I'M NOT SURE THAT IT WOULD, FOR
5	INSTANCE, COVER PUTS OR THINGS LIKE THAT. I JUST
6	THINK IT NEEDS TO BE VIEWED CAREFULLY.
7	CHAIRMAN ROTH: AGAIN, WHEN WE GET THIS
8	FINISHED AND WE HAVE THE DOCUMENT AND WE HAVE THE
9	PUBLIC COMMENT AND THE ICOC COMMENT, IT WILL
10	FINALLY GO SCOTT, WHERE DOES IT GO TO GET THE
11	FINAL REVIEW?
12	MR. TOCHER: OFFICE OF ADMINISTRATIVE
13	LAW.
14	CHAIRMAN ROTH: THAT'S TERMS I TRY NOT TO
15	LEARN. OFFICE OF ADMINISTRATIVE LAW WILL LOOK AT
16	IT. IF THERE'S ANYTHING THAT WE HAVEN'T SEEN, IT'S
17	BOUND TO COME OUT THERE. HOPEFULLY WE'LL KNOW
18	BEFORE WE EVER GET THERE.
19	MR. KLEIN: QUESTION, DUANE. ON THE
20	PRIVATE COMPANY, SO AS NOT TO HAVE THIS CONTINGENT
21	LIABILITY IMPAIR THEIR ABILITY TO RAISE MORE MONEY,
22	WHICH WE'RE TRYING TO INDUCE BECAUSE WE'RE TRYING
23	TO LEVERAGE, IS IT YOUR CONCEPT THAT THIS PUT WOULD
24	BE SUBORDINATED TO LATER ROUNDS OF LENDING AND
25	CAPITAL?

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1	CHAIRMAN ROTH: SO I'M GOING TO ASK JOHN
2	TO TALK WITH HIS PARTNERS AND GET US SOME
3	INFORMATION. THE REASON I'M FAIRLY CONFIDENT THAT
4	THIS ISN'T A BIG DEAL IS BECAUSE EVERY BANK DOES
5	THIS. AND THEY HAVE IT IN THEIR DOCUMENTS WHEN
6	THEY DO THESE. SO WE'LL FIND OUT HOW THEY ADDRESS
7	IT AND MAKE SURE THAT IT DOESN'T CREATE A
8	CONTINGENT LIABILITY DOWN THE ROAD THAT WOULD
9	PREVENT THEM IN ANY WAY. THE SAME THING ON
10	CASHLESS EXERCISE. THERE'S OFTEN DEBATE ABOUT
11	WHETHER THEY WANT TO DO IT OR NOT. IN OUR CASE, IT
12	JUST MAKES IT ROCK SIMPLE FOR US BECAUSE WE CAN'T
13	HOLD THE STOCK TO REQUIRE THAT.
14	FINALLY, IN TERMS OF PERCENTAGE WARRANT
15	COVERAGE, I'VE PERSONALLY DONE MANY FINANCINGS,
16	DIFFICULT ONES, WHERE THE INVESTMENT BANK ASKED FOR
17	A HUNDRED-PERCENT WARRANT COVERAGE. THAT IS NOT
18	OUT OF THE ORDINARY. SO I DON'T THINK THE NUMBERS,
19	WHEN YOU DO THE MATH AND YOU ACTUALLY LOOK AT HOW
20	MANY WARRANTS YOU'RE AGREEING TO GIVE ON A THREE OR
21	\$5 MILLION LOAN IN RELATIONSHIP TO THE TOTAL VALUE
22	OF YOUR COMPANY, IT SHOULDN'T COME OUT TO BE AN
23	EXTRAORDINARY NUMBER.
24	I WOULD FURTHER SAY THAT ONE THING WE
25	SHOULD CONSIDER IS A CAP THAT SAYS IN NO CASE WILL
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1	WE OWN MORE THAN SOMETHING LIKE 20 PERCENT, AND
2	THAT WOULD BE IN THE SMALLEST COMPANIES THAT WE
3	MIGHT DO THAT.
4	ANYWAY, THE CONCEPT HERE IS TO FORCE THE
5	APPLICANTS DOWN TWO PATHWAYS, RECOURSE OR
6	NONRECOURSE, BASED ON HOW THEY FEEL ABOUT WARRANTS
7	AND HOW THEY FEEL ABOUT THEIR PRODUCT, AND GIVE
8	THEM AN OPTION UP FRONT. WE WON'T MAKE THAT
9	DETERMINATION. IF THEY CHOOSE THE NONRECOURSE,
10	THEN THE ONLY THING WE GOT IS THE WARRANTS IF THE
11	PRODUCT FAILS. IF THEY CHOOSE THE RECOURSE LOAN,
12	WE'VE GOT THE CHANCE TO HAVE THE LOAN REPAID AND
13	WE'VE GOT A FEW WARRANTS. REASONABLE?
14	OKAY. ANYTHING ON THE PHONE? WE'RE PAST
15	DUE HERE, AND I REALLY APOLOGIZE FOR THIS. I
16	THOUGHT WE COULD GET IT WRAPPED UP BY SIX. ANY
17	FINAL PUBLIC COMMENTS, IF THERE'S NOTHING ON THE
18	PHONE? IF NOT, I THINK WE CAN STAND ADJOURNED.
19	THANK YOU ALL FOR YOUR INPUT AND YOUR HELP. AND,
20	JOHN, ESPECIALLY THANKS FOR COMING UP.
21	(THE MEETING WAS THEN ADJOURNED 6:20
22	P.M.)
23	
24	
25	
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REPORTER'S CERTIFICATE

I, BETH C. DRAIN, A CERTIFIED SHORTHAND REPORTER IN AND FOR THE STATE OF CALIFORNIA, HEREBY CERTIFY THAT THE FOREGOING TRANSCRIPT OF THE PROCEEDINGS BEFORE THE BIOTECH LOAN TASK FORCE OF THE INDEPENDENT CITIZEN'S OVERSIGHT COMMITTEE OF THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE IN THE MATTER OF ITS REGULAR MEETING HELD AT THE LOCATION INDICATED BELOW

> 1400 J STREET ROOM 203 SACRAMENTO, CALIFORNIA ON MARCH 11, 2008

WAS HELD AS HEREIN APPEARS AND THAT THIS IS THE ORIGINAL TRANSCRIPT THEREOF AND THAT THE STATEMENTS THAT APPEAR IN THIS TRANSCRIPT WERE REPORTED STENOGRAPHICALLY BY ME AND TRANSCRIBED BY ME. I ALSO CERTIFY THAT THIS TRANSCRIPT IS A TRUE AND ACCURATE RECORD OF THE PROCEEDING.

BETH C. DRAIN, CSR 7152 BARRISTER'S REPORTING SERVICE 1072 BRISTOL STREET SUITE 100 COSTA MESA, CALIFORNIA (714) 444-4100