CIRM
CALIFORNIA'S STEM CELL AGENCY

MEMORANDUM Date: April 8, 2016

To: Members, Science and Intellectual Property and Industry Joint Subcommittee

cc: Jon Thomas, Randy Mills, Maria Millan, James Harrison, Amy Lewis, Ben Huang

From: Neil Littman

Re: Proposed Award Terms for the Accelerated Therapies Public Private Partnership

Dear Science and IP Joint Subcommittee Members,

Attached for your consideration are our recommendations and proposed financial terms for the Accelerated Therapies Public Private Partnership ("ATP3") award. The attached Term Sheet is the culmination of discussions with multiple experts in finance, biotechnology, and the law.

The overarching objective of ATP3 is to encourage industry involvement in cell therapy through the creation of public-private partnership that advances existing high quality CIRM-funded stem cell technologies toward commercialization. Our main objective in structuring the terms of the award was to strike a balance between ensuring a financial return to CIRM and thus the citizens of California while at the same time ensuring the attractiveness of the award to encourage industry participation (the overarching goal of ATP3). Although CIRM is not a venture capital firm or a traditional investor and is willing to bear significantly higher levels risk, the risk should be commensurate with the potential reward. Thus, if we are successful in creating a valuable stem cell enterprise in the State of California, it is appropriate that CIRM and the citizens of California participate in the financial upside.

The following memo provides an overview of the key terms outlined in the attached Term Sheet, along with our rationale and decision making process of how we arrived at each of the key terms.

I. Rationale for the Convertible Note Structure.

A. *Why we are recommending a new type of award structure.*

Under CIRM's current award structure (as outlined in the Grants Administration Policy here), we believe that CIRM and the citizens of California would not proportionately be compensated given the size and risk profile of the ATP3 award. This award is unique, and provides for the establishment of a new for-profit California-based entity, which if successful, may command a significant future valuation.

We therefore opted to evaluate alternative financial structures for this award, and concluded that within the confines of State law, a convertible note offered the best risk versus reward profile for CIRM and the citizens of California (as a State agency, CIRM is prohibited from owning equity). A convertible note is a financial instrument that is treated as debt, but at the holder's discretion can be converted into a predetermined amount of equity during a specified time frame.

A convertible note financing is commonplace in the biotechnology and venture capital community, and allows the note holder to participate in the upside should the issuer become a valuable entity. On the downside, the note holder is protected by the debt portion of the instrument, and could choose not to convert should the issuer perform poorly. As discussed in more detail below, the terms include the right to transfer the notes, which would enable CIRM to realize value from the success of ATP3, consistent with state law.

Although CIRM may not hold securities, CIRM may sell the notes to third parties prior to conversion.

B. *Why we are recommending the award be broken into a three tiered (e.g. tranched) structure.*

After careful review, we concluded that a three-tiered structure will give CIRM the most flexibility for managing the award in the best interests of our awardee, along with the added benefit of generating a potential near-term financial return. These funds could then be recycled back into future grants under CIRM 2.0.

If CIRM were to structure the award as a single convertible note, then we would be unable to sell the note to a third party prior to the end of the award period without having to also terminate the award to our awardee. This is clearly not in the best interest of our awardee, or for the program as a whole. A three tiered structure allows us to break the award into discrete $25 million tranches which, once fully drawn down or upon a Conversion event (the "Notes' as described in the Term Sheet), could be sold to a third party. CIRM could potentially sell each tranche of the Notes separately, without impacting our obligations to our awardee or otherwise jeopardizing the intent of the award.

Thus, the three tiered structure will allow CIRM to realize a potential financial return prior to the Maturity Date of the award without adversely impacting our commitment to accelerate stem cell treatments to patients with unmet medical needs.

II. Rationale for the Terms of the Notes

A. *Why we are recommending a Repayment Discount.*

We are proposing a 50% repayment discount on the principal amount plus accrued interest in light of the risk and in order to ensure a robust pool of high quality applicants. As discussed in the ATP3 Concept Proposal at the December 17, 2015 ICOC meeting (here), there has been a lack of industry pull for CIRM-funded stem cell technologies, with only a small percentage of CIRM's academic programs having secured a viable industry partner.

One way to encourage industry participation in ATP3 and incentivize the licensing of CIRM-funded technology is to provide an award structure with a low cost of capital. CIRM is willing to bear significantly higher risk than the average investor or biopharmaceutical company and, therefore, is willing to shoulder a significant portion of the risk in developing these novel technologies. In financial terms, this translates into our ability to offer a source of funding with a relatively low cost of capital. This concept is captured in the Repayment Discount.

Fundamentally, the Repayment Discount provides an incentive for industry to participate in ATP3 and subsequently in-license CIRM-funded technology by requiring that the awardee only repay fifty cents on the dollar. This effectively transfers a significant portion of the risk in developing CIRM-funded technologies from the awardee to CIRM, and helps CIRM increase the number of partnered projects, a key objective outlined in our 5 Year Strategic Plan (here).

B. *Why we are recommending an Equity Kicker.*

The concept behind the Equity Kicker is to entitle the Note Holder to additional upside at the time of conversion. The Equity Kicker also acts as anti-dilution protection for the Note Holder. For example, if the ATP3 awardee raises additional capital from sources other than CIRM (which we highly encourage), the Note Holder's ownership would be diluted which would dramatically affect the financial value of the Notes (and the value which CIRM would receive from the sale of the Notes).

The Equity Kicker is structured so that the Note Holder is entitled to up to 10% of the company's fully-diluted capitalization, proportional to how much CIRM funding is drawn down.

C. *Why we choose a three-tiered Equity Kicker.*

We chose to structure the Equity Kicker into three declining ownership tiers based on the three tranches of the Notes. The concept behind a declining ownership structure is that the first tranche will be the riskiest capital into the company and should come with the highest potential reward (e.g., 0.20% of the company's fully-diluted shares per million of principal).

As the company progresses and draws down the additional two tranches, our goal was to ensure the continued attractiveness (e.g., cost of capital) of the CIRM funds. To accomplish this, we decreased the Note Holder's ownership percentage under tranches two and three.

This tiered structure is meant to incentivize the company to fully draw down on the full $75 million of the award, which would in turn provide CIRM with the highest potential financial upside. Of course, if the company chooses to raise funding from third party sources, then the

Note Holder would also be protected from future dilution without having to participate in the future round(s) of financing.

D. *Conversion features.*

Convertible debt comes with a convertible feature, allowing the Note Holder to convert the debt portion of the instrument into shares of a company's stock (e.g., equity) based upon a set of predetermined conditions.

Under the terms of this award, once a conversion event has been triggered (as defined in the Term Sheet), the Note Holder, at its sole discretion, has the option to convert the Discounted Amount (e.g., 50% of the principal amount plus accrued interest) into shares of the company's stock.

The value of the conversion is tied to the value of the company at a future point in time and a pre-specified event (as defined in the Term Sheet). In this way, the Note Holder has the potential to participate and realize value through the convertible note as the company's value increases. To be compensated for providing a critical source of funding early in the company's life cycle and bearing a large amount of risk, the Note Holder will convert the Notes at a discounted rate of 20% of the price per share as valued at one of the pre-specified events as outlined in the Term Sheet.

III. <u>Transferability.</u>

A. *Why it is necessary to include a transferability clause.*

The Transferability clause is important to include in the structure of this award because, under State law, CIRM cannot convert the Note into equity. Thus, in order for CIRM to realize a financial return commensurate with the future equity value of the company, CIRM must be able to transfer (e.g. sell) the Notes to a third party. Of course, this represents the upside or best case scenario. If the company does not perform well, CIRM would choose not to sell the Notes and instead require repayment of the discounted principal amount plus accrued interest.

IV. <u>Protection</u>

A. *Reimbursement Based Payments.*

Unlike standard CIRM 2.0 awards that are disbursed upfront and which provide funding for the achievement of pre-negotiated milestones, CIRM funds under the ATP3 award will be disbursed on a reimbursement basis. This ensures CIRM has the final authority over the use of our funds and provides an additional check point and level of security to ensure CIRM funding is spent in accordance with the terms of the award.

B. *Consent Rights.*

The terms of the award include certain Consent Rights that have been included for the protection of the Note Holder. These rights aim to strike a balance between providing the Note Holder with sufficient protection while at the same time not being overly restrictive to the Company.

Requested Action

At its December 17, 2015 meeting, the Board delegated authority to the Science and IP and Industry Subcommittees to approve the terms of the ATP3 award. We therefore request the joint Subcommittee's approval of these terms so that we may issue a request for applications.