CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE

M E M O R A N D U M

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To: Independent Citizens Oversight Committee (ICOC)
Subject: Concept proposal for RFA 12-08, Strategic Partnership II

Background:

This concept proposal addresses the continuation of CIRM's Strategic Partnership initiative, which was created to attract industry engagement and investment in CIRM-funded stem cell research. The intent of the Strategic Partnership program is to create incentives and processes that will: (i) enhance the likelihood that CIRM-funded projects will obtain follow-on funding for Phase 3 clinical trials; (ii) provide a source of co-funding in the earlier stages of clinical development, and (iii) enable CIRM- funded projects to access expertise within pharmaceutical and large biotechnology partners in the areas of discovery, preclinical, regulatory, clinical trial design and manufacturing process development.

The Strategic Partnership concept was approved by the ICOC on October 26, 2011 and amended on September 5, 2012. The current concept directs CIRM to implement the program using a standard Request for Application process that has a defined submission period. Each RFA will define the scope of funded research which may be narrower than the currently approved concept scope which encompasses a broad range of research from basic to phase 2 clinical studies.

The Strategic Partnership concept contains two unique features in addition to its twice per year solicitations, that distinguish it from the Disease Team concept: Strategic Partnership i) requires applicants to show evidence of either having the financial capacity to move the project through development, or of being able to attract the capital to do so (commercial validation) and ii) requires co-funding from the applicant and/or their strategic partner regardless of the stage of research.

The first RFA under the Strategic Partnership initiative (RFA 12-05: Strategic Partnership I) is anticipated for ICOC consideration on October 25, 2012. This program will issue repeat calls approximately every 6 to 9 months in fiscal year 2013.

Active management of these milestone-driven projects will include discussion with CIRM's Clinical Development Advisory Panel (CDAP) at key decision points, such as the transition from IND filing to initiation of a clinical trial.

Concept Proposal for RFA 12-08: Strategic Partnership II

RFA 12-08: Strategic Partnership II is similar to Strategic Partnership I in scope and objective and proposes to keep the total award amount per project at $10M, but to allow the possibility to increase the award up to $15M per project, subject to ICOC approval and only under exceptional circumstances, and would have to be accompanied by budget and justification. This modification was discussed and approved by the Science Subcommittee of the ICOC on October 8, 2012.

Purpose:

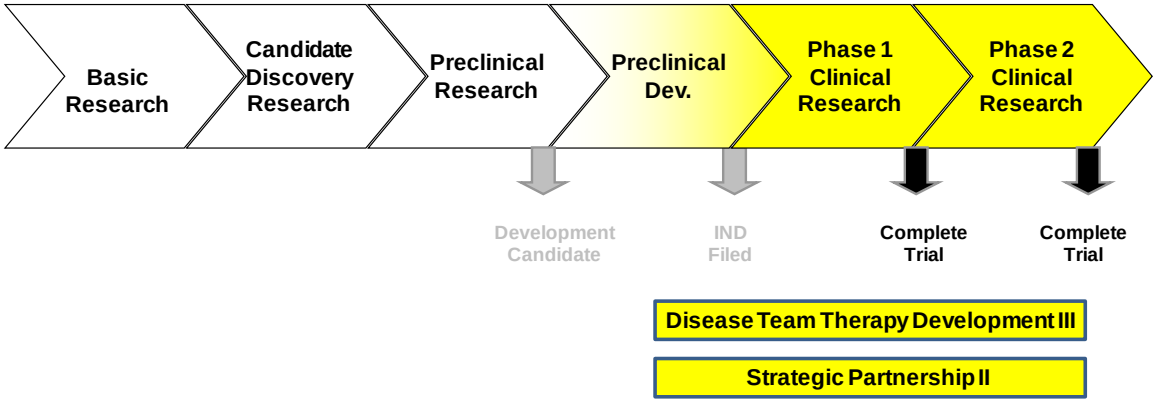
- Aligned with CIRM's 5 year strategic goal to attract industry engagement and investment in CIRM funded stem cell research.

- Aligned with CIRM's 5 year strategic clinical objective to advance stem cell science into clinical trials to achieve therapeutic benefit to patients.

Objective:

- Completing a Phase 1 study to demonstrate preliminary safety, range of safe doses to be studied in subsequent trial, and to assess measures of biologic/clinical activity in humans; and/or
- Completing a Phase 2 clinical study conducted to evaluate efficacy of the therapeutic in a particular indication.

Scope - Activities:



CIRM intends to support meritorious projects with strong rationale and supporting data for use of the proposed therapeutic candidate in the disease or injury the applicant intends to target.

The key objective of this initiative is to complete a clinical trial. This award will support the following activities:

- The conduct of early clinical trials (Phase 1 or Phase 2) for a single therapeutic entity
- IND-enabling preclinical development activities necessary to enable a Phase 1 clinical trial
- Supporting activities

This award excludes early research and translation activities leading up to selection of a therapeutic development candidate, pivotal efficacy studies (Phase 3), and cGMP production for pivotal efficacy studies.

Project Eligibility:

Readiness:

- Single final therapeutic development candidate chosen, for which there is a strong clinical rationale
- Strong preclinical proof-of-concept (POC) evidence supporting use of the candidate in the target disease/injury; for example, disease modifying activity in a relevant animal model with the intended therapeutic candidate.
- For all projects proposing to start with IND-enabling studies, the applicant must have completed a pre-IND meeting with FDA. Based on the outcome of that discussion, a project should be projected to be within 12-18 months of IND filing.
- For projects ready to start a Phase 1 clinical trial, applicants must have submitted an IND package to the FDA by the LOI deadline and must have received approval to move forward into clinical testing by the application review date.
- For projects ready to start a Phase 2 clinical trial, applicants must have Phase 1 data demonstrating preliminary safety in the target population.

Therapeutic Candidate:

This award will support a therapeutic candidate derived from or comprised of the following:

- pluripotent-derived cells
- allogeneic tissue-derived stem cells or progenitor cells for repair / regeneration
- stem cell-engineered functional tissues for implantation in vivo
- small molecules or biologics targeting endogenous stem cells as primary mechanism of action (in vivo) for regeneration and repair
- genetically or pharmacologically-modified HSCs

Institutional Eligibility:

- Open to for-profit, academic and not-for-profit research institutions

Evidence of Commercial Validation

All applicants must provide evidence of commercial validation to be eligible for this award:

- **For-profit applicants** must provide evidence of commercial validation as defined either by financial strength and / or via a collaborative development agreement with a large biotechnology/pharmaceutical partner
- **Not-for-profit applicants** must have a collaborative development agreement with a large biotechnology/pharmaceutical partner (market capitalization of at least $500M)

Award information:

- CIRM is targeting 2 to 4 awards
- CIRM proposes to commit up to $40 M under this RFA for Awards

Amount:

- CIRM will fund up to $10 M total costs per project for programs to develop the candidate therapeutic.
- Under exceptional circumstances, and subject to ICOC approval, and with detailed budget and specific justification together with financial capacity to satisfy matching requirements, CIRM will fund up to $15M total costs. All aspects of the research project should have a well-justified budget.

Co-Funding:

- CIRM will require co-funding from the applicant in the form of at least a 1:1 match of the total project costs.

Award mechanism:

- Grant, if PI holds the IND and is from a not-for-profit organization
- Choice of Grant or Loan, if a for-profit organization holds (sponsors) the IND and is the applicant organization. The loan holder will be responsible for the entire award from CIRM.

Provisional Time Table:

Post RFA 12-08	Nov	2012
LOI applications due	Jan	2013
Full Applications due	Feb	2013
Review of Applications by Grants Working Group (GWG)	April/May	2013
Review and Approval by ICOC	June/July	2013
Earliest Funding of Awards	3 Q	2013