February 23, 2017



0 DISCOVERY

O TRANSLATIONAL

DEDUCATION

OCLINICAL

O INFRASTRUCTURE

CLIN, TRAN and DISC Concept Plan Amendments Agenda Item #10

Gil Sambrano

Vice President, Portfolio Development and Review

Eligibility Determination

Explicitly state CIRM's authority to make an eligibility determination, except with respect to the subjective clinical criteria, until the time of contract execution.

- Apply prospectively to awards approved from Feb 23, 2017 forward.
- CIRM will inform the Application Review Subcommittee if it exercises this authority on any award approved by the Subcommittee.



Good Standing Requirement (All concepts)

Require applicants to verify:

- (1) systems in place to track CIRM funds (limited to forprofits and non-profits in existence for < 5 years)
- (2) CEO, CFO, or PI has not been convicted of, and is not under investigation for, crimes involving fraud or misappropriation (*limited to for-profits and non-profits in existence for < 5 years*)
- (3) PI is not under investigation for research misconduct and is not barred from receiving research funds by DHHS Office of Research Integrity



Personnel Eligibility

PI Minimum Percent Effort: Require a PI to propose and justify percent effort for each phase of the project timeline to match the proposed activities (but not less than 15% averaged over the project period). (CLIN 1, 2, 3)

- Ensure effort matches activity
- Ensure CIRM is not paying for unnecessary work
- Minimum based on experience of GWG clinician scientists that oversee clinical trial projects



Personnel Eligibility

- Project Manager: Allow applicants to satisfy requirement by entering into a contract with CIRM's Stem Cell Center (CLIN and TRAN 1-3)
- Project Manager Minimum Percent Effort: Reduce minimum percent effort for TRAN projects from 50% to 35%
 - Based on advice from independent consultants and the SCC, which are experienced in providing project management services for this stage of development.



Project Eligibility

Readiness: Reduce proposed time to file an IND for CLIN1 applicants from 24 months to 18 months

- Align with CIRM strategic goal to reduce time from discovery phase to initiation of clinical trial to 4 years (30 months TRAN +18 months CLIN1)
- Average time proposed by CLIN1 applicants is 16.8 months



Project Eligibility

- Small Molecule/Biologic: Clarify eligibility of research involving small molecules or biologics:
 - for which a stem cell is necessary to manufacture the therapy (e.g., exosomes derived from a stem cell)
 - that modifies a stem cell therapy (e.g., tracking agent)
 - Applies to TRAN 1, CLIN 1 and CLIN 2-Phase 1 trials



Project Eligibility

- Phase 2 Trials: Restrict to cellular therapies where stem/progenitor cells either compose the therapy or are used to manufacture the cell therapy
- Phase 3 Trials: (1) Restrict to cellular therapies where stem/ progenitor cells either compose the therapy or are used to manufacture the cell therapy <u>AND</u> where the therapy is for <u>rare indications</u>; and (2) Allow applicant that has been informed by the FDA that its phase 2 trial could be used for marketing approval to apply for Phase 3 funding



Eligibility for Devices

- TRAN 3: Include studies on a device where the therapeutic mechanism of action requires the recruitment or incorporation of an endogenous human stem or progenitor cell
- CLIN 2: Limit device trials to feasibility studies



CLIN3 Program Scope

Limit to awardees for new activities that would enable FDA marketing approval of the proposed stem cell treatment



Funding Caps (CLIN)

- CLIN 1: \$6M (non-profits) & \$4M (for-profits)
- CLIN 2: (1) Phase 1 trial: \$5M (for-profits) and \$9M (non-profits)
 (2) Phase 2 trial: \$12M
 (3) Phase 3 trial: \$15M
- CLIN 3: \$15M



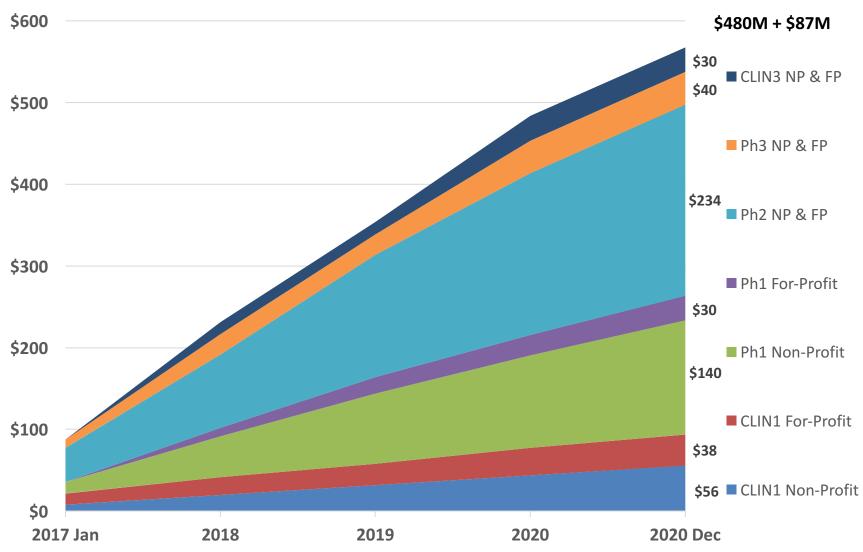
Clinical Award Cap Model

About \$478M available. Goal is to fund 40 CLIN2 trials between 2017 and 2020

| | | | | | CY2017-2020 | |
|-------|-----------|------------|---------|-----------|-------------|---------|
| CLIN | Stage | NP or FP | #Awards | Award Cap | Amount | % Share |
| CLIN1 | IND | Non-Profit | 8 | \$6.0 | \$48.0 | 15% |
| CLIN1 | IND | For-Profit | 6 | \$4.0 | \$24.0 | |
| CLIN2 | Phase 1 | Non-Profit | 14 | \$9.0 | \$126.0 | 33% |
| CLIN2 | Phase 1 | For-Profit | 6 | \$5.0 | \$30.0 | |
| CLIN2 | Phase 2 | NP/FP | 16 | \$12.0 | \$192.0 | 40% |
| CLIN2 | Phase 3 | NP/FP | 2 | \$15.0 | \$30.0 | 6% |
| CLIN3 | Phase 2/3 | NP/FP | 2 | \$15.0 | \$30.0 | 6% |
| | | | | | \$480.0 | |



CLIN Funding per Stage & Awardee Type (\$Ms) CY2016 Actual & CY2017-2020 Estimate



Fundable Activities

- CLIN 1 and 2: Permit funding for necessary manufacturing activities for a follow-on clinical trial
- CLIN 2: Permit funding for comparability studies and commercial development activities



REQUESTED ACTION

Approval of proposed amendments to CLIN, TRAN and DISC concept plans

