

Cell therapy for Lung Disease Webinar 2013

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PACT Webinar

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Lung Stem Cell Science: NHLBI targeted support

- Initiatives have supported fundamental knowledge on the role and potential of stem/progenitor cells in lung repair and regeneration
- RFA HL07-003 Collaborative Studies on Lung Stem Cell Biology and Cell Based Therapy
- RFA HL11-025 & 026 New Strategies for Growing 3D Tissues (R01)
- RFA HL12-006 Lung Regeneration and Repair Consortium (LRRC) <https://www.lungrepair.org/>
- These were not designed for conducting translational or clinical research

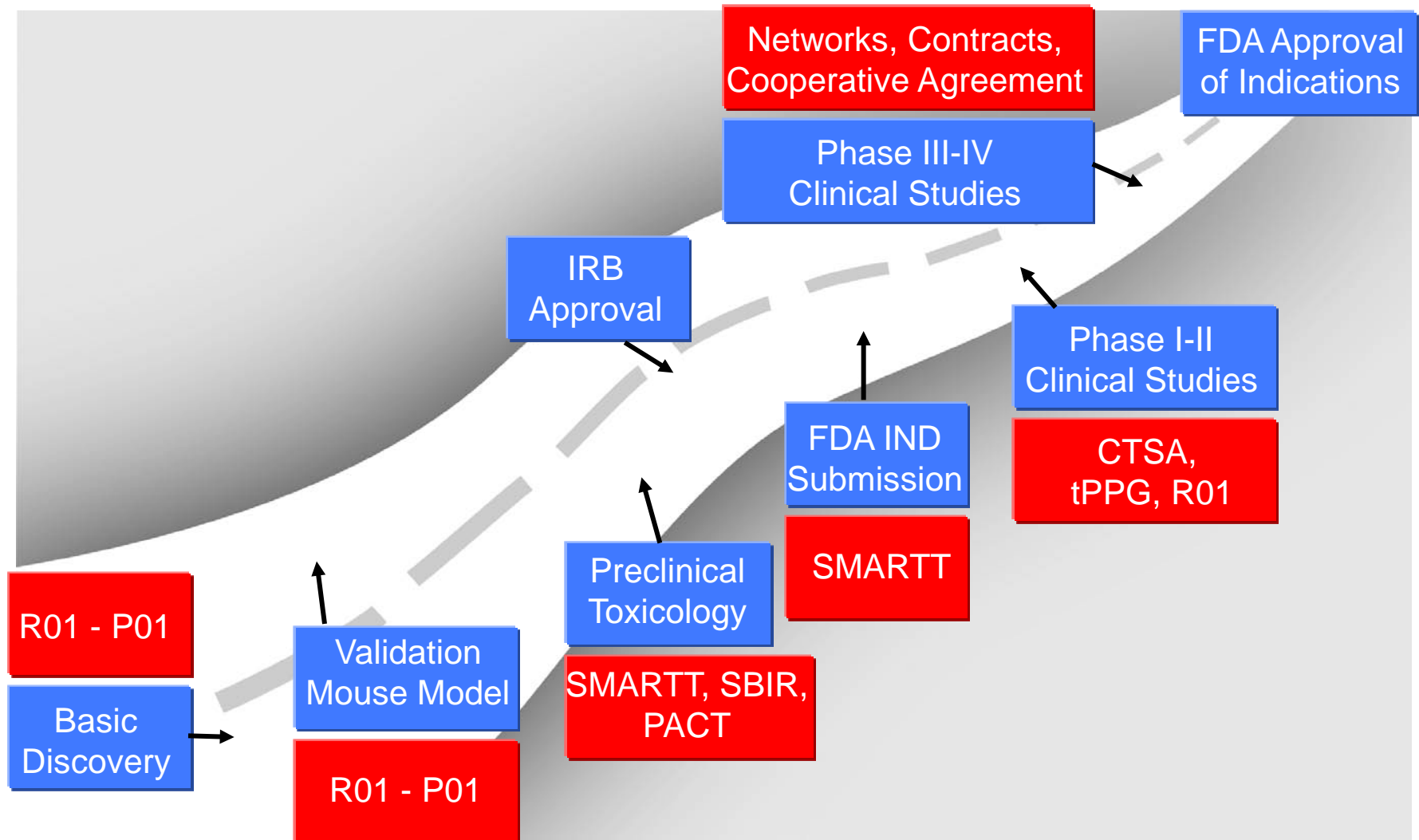
NHLBI Workshop: Cell Therapy for Lung Diseases

November 13-14, 2012

Executive Summary <http://www.nhlbi.nih.gov/meetings/workshops/cell-therapy.htm>

- What are the mechanisms by which mesenchymal stem (stromal) cells (MSCs) and other progenitor cells exert biological activity *in vivo* in both the mature and the immature lung?
- What are the cellular targets of administered MSCs and other cell-based preparations?
- What are the optimal modes of delivery of MSCs in terms of efficacy and safety? Do these differ for specific lung diseases?
- What are the goals of MSC and other cell based therapies on the prevention or treatment of specific adult and pediatric lung diseases?
- What is the potential for scalability of MSC and other cell based therapeutic preparations for sufficient expansion for large clinical trials?
- What are the mechanisms by which other stem and progenitor cell populations might have efficacy in lung repair and regeneration in both mouse and human lungs?
- What are the critical components of cell therapy products that impact safety and efficacy?
- There is a need to develop specific and sensitive assays to further define what cell characteristics are related to cell potency and develop minimum criteria that should be reported in clinical trials.

The Road from Discovery to Clinical Product





Learn more about Division of Lung
Diseases, NHLBI

<http://www.nhlbi.nih.gov/about/dld>

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