AIDS Vaccine Research: An overview MAY 2015

Additional Vaccine Approaches

OVERVIEW DEVELOPMENT PROGRAMS ADDITIONAL VACCINE APPROACHES NEUTRALIZING ANTIBODIES

STATE OF THE FIELD

A range of vaccine approaches are being tested in early phase clinical trials. The table provides highlights of this area of HIV vaccine research. For full information on clinical trials, please visit www.avac.org/pxrd.

Vaccine strategy	Trials and products	Why	Sponsors / Developers
DNA DNA + MVA DNA + AIDSVAX	 DNA + modified vaccinia Ankara (MVA) boost candidates being tested in two Phase I trials. DNA + AIDSVAX candidate being tested in two Phase I trials for various outcomes. DNA delivered through electroporation in Phase II TAMOVAC-02 trial. 	DNA vaccines induce anti-HIV antibodies that last. This kind of durability is important and is one reason these candiates are being explored.	Geovax HVTN IAVI
Adenovirus vectors	 Ad35 being tested in various regimens in Phase I trials in Africa, Europe, and USA. Chimp-Adenovirus vector being tested as therapeutic vaccine in Phase I trial. 	Adenovirus vectors are effective in eliciting T-cell responses; Ad5 is not moving forward, but other Ad-based vectors are progressing through early clinical trials.	IrsiCaixa University of Oxford
Replicating vectors	 SeV-G vaccine in Phase I study in Kenya, Rwanda and the UK using a replicating vector based on the Sendai virus plus a boost with an Ad35-vectored vaccine. Replicating Ad26 (rcAd26) + mosaic insert being tested through oral administration in Phase I does-escalation in USA. Tiantan vector, a vaccinia virus, tested in Phase IIa trial in China, in combination with DNA prime; analyzing results. Phase IIb trial planned with gp145 protein in partnership with NIH. 	Replicating vectors provide ongoing stimulation to the immune system increasing the amount of cellular immune responses generated, thus potentially increasing the immunogenicity of the vaccine being studied.	IAVI China CDC
Lipopeptides	LIPO-5 candidate being tested in prime-boost combination in proof-of-concept Phase II trial in HIV-infected individuals.	Prime-boost combination using lipopeptide has elicited T-cell responses important to immune responses.	Inserm-ANRS

ADVOCATE'S CHECKLIST

✓ PUSH FOR PROMISE

Early trial results will yield important data

- Push for comparison across candidates and prioritization of most promising vaccines to move forward.
- **✓** UNDERSTAND PATHWAYS

Many early phase trials are not on a clear path to licensure

 Push for this information and for stakeholder involvement in discussions and decision-making.