INTERIM PHARMACOKINETIC ANALYSIS FROM THE EVADE
PHASE 2 CLINICAL TRIAL OF MEDI3902, A BISPECIFIC
MONOCLONAL ANTIBODY AGAINST PCRV AND PSL OF
PSEUDOMONAS AERUGINOSA

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Facts & Figures
Start date January 2015 - End date October 2020
Contributions IMI under grant agreement
115737-4 resources composed of financial
contribution from the European Union Seventh
Framework Program (FP7/2007-2013) and
EFPIA contributions
IMI funding .................................................. 18M€
EFPIA in kind (MedImmune) ........................... 9M€
Total Cost .................................................. 27M€
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Challenge
• Pseudomonas aeruginosa (PA) is a leading cause of
ventilator associated pneumonia and often exhibits
antibiotic resistance
• MEDI3902 is a bivalent, bispecific human IgG1k
monoclonal antibody that selectively binds to both
PCrV and Psl of PA, inhibiting the pathogen’s
cytotoxicity and promoting opsonophagocytic killing
• The efficacy and safety of MEDI3902 as immuno-
prophylactic against PA among mechanically
ventilated subjects is being evaluated by the ongoing
phase 2 EVADE (Effort to Prevent Nosocomial
Pneumonia caused by Pseudomonas aeruginosa in
Mechanically Ventilated Subjects) trial

Here, interim pharmacokinetic (PK) and antidrug antibody
(ADA) data from subjects included are reported

Approach & Methodology
Placebo

PA
colonization

Study day

PK (ELISA)

MEDI3902 1500mg

MEDI3902 500mg

MEDI3902 1500mg

MEDI3902 500mg

>10 subjects

>10 subjects

Day 1
Day 2
Day 4
Day 8
Day 15
Day 22
Day 29
Day 50

Impact & take home message
ADA response had no clear effect on the PK profile
A single IV dose of MEDI1500mg maintained a mean serum concentration above the target level of 1.7µg/mL for 22 days postdose
The data monitoring committee recommended continuation of the trial with the MEDI3902 1500mg dose vs. placebo

Value of IMI collaboration
All recruiting sites are part of the COMBACTE CLIN-Net and LAB-Net research network.
The academic networking and close collaboration of academic experts on VAP and pre-emptive trials with MedImmune
allowed scientific input from the early stages of protocol development. Accompaniment in organizational aspects had facilitated participant recruitment and project follow up.