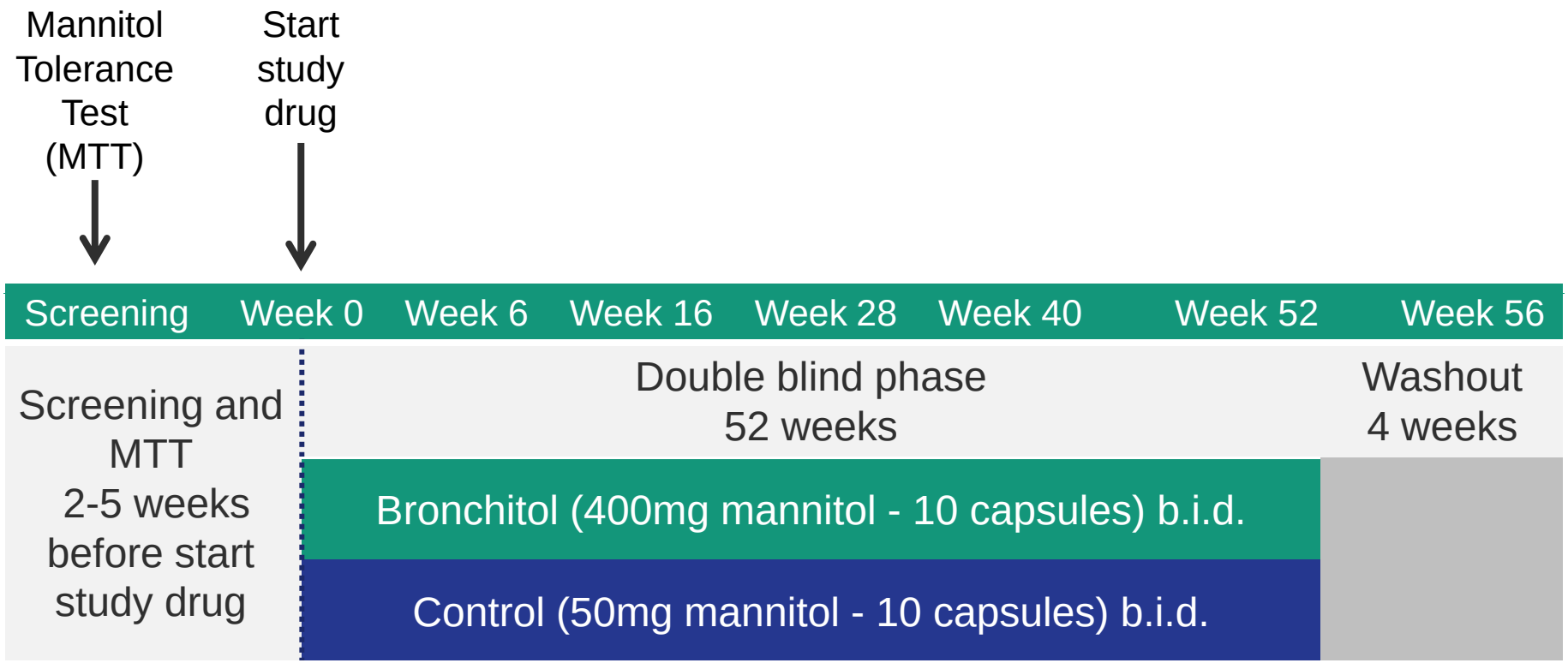
DPM-B-305 Safety and efficacy of inhaled mannitol (Bronchitol) over 12 months in bronchiectasis

B-305: Study details

- Multi-center, randomized (1:1), parallel, double blind, controlled, 12 month safety and efficacy study
- Inclusion Criteria
  - Confirmed diagnosis of (non-CF) Bronchiectasis
  - 18-85 years of age
  - FEV_1 40 - 85% predicted & ≥ 1L
  - Sputum producers (screening ≥10g)
  - ≥ 2 exacerbations in past year, and ≥ 4 in the past 2 years
  - SGRQ total score ≥30
  - Standard therapy continued
  - Hypertonic saline not allowed
  - Stable condition on entry (including no major haemoptysis)
  - Pass Mannitol Tolerance Test (MTT) without pre-bronchodilator use
    - 84% of patients passed the MTT

B-305: Study design



B-305: Endpoints

- Primary endpoint
  - Exacerbation rate (graded pulmonary exacerbation)
- Secondary efficacy endpoints included:
  - St George Respiratory Questionnaire (SGRQ) score
  - Days of antibiotics use
  - Time to first exacerbation and duration of exacerbations
  - 24 hour sputum volume
  - Daytime sleepiness score - Epworth (ESS)
  - Spirometry (pre-bronchodilator)
  - Hospitalisations due to exacerbations
- Safety

B-305: Demographics

Variable at Baseline (ITT population)	n=461
Mean age years	59.8
Gender (Female)	289 (62.7%)
Age at diagnosis	43.5
FEV_1 mean Litres % predicted	1.72 62.3%
Study withdrawal rate	Bronchitol : 18.0% Control: 17.1%

B-305: Study results

Primary endpoint	Difference in the rates of graded pulmonary exacerbations (rate ratio)	Reduced 8%	Not significant
Secondary endpoints	• Time to first exacerbation (Hazard ratio) • Days of antibiotic use – duration (rate ratio) • Quality of life: Change in SGRQ • Sputum weight: 24 hour collection (g) • Spirometric lung function • Epworth Sleep Score • Hospitalisations for exacerbations rate ratio)	Improved 28% Improved 24% Improved 28% Improved 29% Not achieved Not achieved Improved 39%	0.78 (p=0.022) 0.76 (p=0.0496) -2.4, (p=0.046) +2.8 (p=0.036) Not significant Not significant Not significant
Safety	• Similar overall rates of AE's and SAE's between treatment groups • Acceptable safety profile		

Increased time to 1st exacerbation