Patients screened from Sep 1999 to Mar 2009 at MGH and Jan 2007 to February 2009 at BIDMC after admission to the ICUs with required ARDS predisposing conditions and did not meet exclusion criteria

- No consent because of refusal (n = 322), lack of surrogate (n = 800), or death prior to consent (n = 212)
- Patients not enrolled (n = 28)

Enrolled into prospective cohort and followed for development of ARDS (n = 2786)

- Patients without DNA samples or poor quality DNA samples (n = 391)

Samples genotyped using the Illumina IBC Chip (n = 2395)

- Patients with incomplete clinical data, previous enrollment or history of ARDS (n = 22)

Non-Caucasian (n = 209)

Caucasian patients passing quality control (n = 2063)

Samples with genotyping call rate ≤ 95% (n = 101)

Patients with both pulmonary and extrapulmonary injury (n = 346)

Patients analyzed in this study (n = 1717)

Pulmonary (n = 839)

- ARDS (n = 290)
- Non-ARDS (n = 549)

Extrapulmonary (n = 878)

- ARDS (n = 127)
- Non-ARDS (n = 751)