**WWOX Demonstrates Ancestry-Specific Associations with ARDS Risk in Sepsis**

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**RESULTS**

Single center cohort

**LIMITATIONS**

- Multiple variants surpassed a suggestive threshold
- No variants at conventional GWAS threshold
- Several loci replicated across ancestry
- Rs12934553 was highly associated with ARDS in EA
  - 3 loci within WWOX associated with ARDS risk
  - Opposite directional association in EA and AA
- Rs2592293 in KSR2 associated with ARDS risk in EA and AA subjects with same directionality

**CONCLUSIONS**

- WWOX is implicated in neutrophilic lung injury, tobacco exposures, and vascular permeability
- KSR2 is a molecular scaffolding protein involved in ERK signaling
- WWOX demonstrated associations with ARDS risk in both EA and AA with opposite directionality
- Co-localizing signals with opposing directionality may occur due to different genetic population structure, epigenetic changes, or interactions

**IMPLICATIONS**

- ARDS demonstrates shared and ancestry-specific genetic risk factors
- Increased diversity in genetic studies may enhance our potential for understanding ARDS risk

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