### ICEES - Cohorts & Clinical Feature Variables

### ICEES Asthma and Related Common Pulmonary Disorders

- UNC Health electronic health record data, ~160,000 patients (selected in 2010)
- NIEHS Personalized Environment & Genes Study (PEGS, formerly the Environmental Polymorphisms Registry) survey and SNP data, ~4,000 participants total (~1,000 with self-reported asthma)
  - ~220 overlapping UNC Health/PEGS patients-participants
  - For more information on PEGS, see: <a href="https://www.niehs.nih.gov/research/clinical/studies/pegs/index.cfm">https://www.niehs.nih.gov/research/clinical/studies/pegs/index.cfm</a>
- Available for years 2010-2019
- For feature variable enumeration, see:
   <a href="https://github.com/ExposuresProvider/icees-api/tree/master/doc">https://github.com/ExposuresProvider/icees-api/tree/master/doc</a> and <a href="https://github.com/ExposuresProvider/icees-api-config/glob/master/config/ground-truth-yaml-files">https://github.com/ExposuresProvider/icees-api/tree/master/doc</a> and <a href="https://github.com/ExposuresProvider/icees-api-config/glob/master/config/ground-truth-yaml-files">https://github.com/ExposuresProvider/icees-api/tree/master/doc</a> and <a href="https://github.com/ExposuresProvider/icees-api-config/glob/master/config/ground-truth-yaml-files">https://github.com/ExposuresProvider/icees-api-config/glob/master/config/ground-truth-yaml-files</a>
  - Note that in most cases, clinical feature variables are binned as 0 (no) or 1 (yes)
- For additional information, see: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6748811/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6748811/</a>

# ICEES Primary Ciliary Dyskinesia (PCD) and Related Rare Pulmonary Disorders

- UNC Health EHR data, ~8,000 patients (selected in 2020)
  - ~200 patients with expert-confirmed PCD, ~200 with expert-confirmed idiopathic bronchiectasis, ~200 with expert-confirmed cystic fibrosis
- Available for years 2010-2021
- For feature variable enumeration, see:
   <a href="https://github.com/ExposuresProvider/icees-api/tree/master/doc">https://github.com/ExposuresProvider/icees-api/tree/master/doc</a> and <a href="https://github.com/ExposuresProvider/icees-api-config/glob/master/config/ground-truth-yaml-files">https://github.com/ExposuresProvider/icees-api/tree/master/doc</a> and <a href="https://github.com/ExposuresProvider/icees-api-config/ground-truth-yaml-files">https://github.com/ExposuresProvider/icees-api/tree/master/doc</a> and <a href="https://github.com/ExposuresProvider/icees-api-config/ground-truth-yaml-files">https://github.com/ExposuresProvider/icees-api-config/ground-truth-yaml-files</a>
  - Note that in most cases, clinical feature variables are binned as 0 (no) or 1 (yes)
- For additional information, see: https://pubmed.ncbi.nlm.nih.gov/35837616/

### ICEES Coronavirus (COVID) Infection

- UNC Health EHR data
- Three quarterly data pulls
  - SEP2020, ~100,000 patients
  - JAN2021, ~214,000 patients

- [APR2021, ~100,000 patients]
- Patients selected using N3C phenotype; definition varied as pandemic evolved
  - For more information on N3C, see: <a href="https://ncats.nih.gov/n3c">https://ncats.nih.gov/n3c</a>
  - For information on the N3C phenotype, see: <a href="https://github.com/National-COVID-Cohort-Collaborative/Phenotype\_Data\_Acquisition">https://github.com/National-COVID-Cohort-Collaborative/Phenotype\_Data\_Acquisition</a>
- NIEHS Personalized Environment & Genes Study (PEGS, formerly the Environmental Polymorphisms Registry) survey and SNP data, ~20,000 participants
  - o ~500 to ~1,000 overlapping UNC Health/PEGS patients-participants
  - For more information on PEGS, see: https://www.niehs.nih.gov/research/clinical/studies/pegs/index.cfm
- One year of prior EHR data were captured for each of the three cohorts
- For feature variable enumeration, see:
   https://github.com/ExposuresProvider/icees-api/tree/master/doc and https://github.com/ExposuresProvider/icees-api-config/blob/master/config/ground-truth-yaml-files
  - Note that in most cases, clinical feature variables are binned as 0 (no) or 1 (yes)

## ICEES Drug-Induced Liver Injury (DILI)

- DILI Network data on a cohort of patients with Augmentin-induced DILI, ~300 patients
- Patient enrollment and follow up occurred over years 1994-2019
  - For more information on the DILI Network, see: https://dilin.org/
- Dataset created in 2021
- For feature variable enumeration, see:
   <a href="https://github.com/ExposuresProvider/icees-api/tree/master/doc">https://github.com/ExposuresProvider/icees-api/tree/master/doc</a> and
   <a href="https://github.com/ExposuresProvider/icees-api-config/github.com/ExposuresProvider/icees-api-config/ground-truth-yaml-files">https://github.com/ExposuresProvider/icees-api/tree/master/doc</a> and
   <a href="https://github.com/ExposuresProvider/icees-api-config/github.com/ExposuresProvider/icees-api-c
  - Note that in most cases, clinical feature variables are binned as 0 (no) or 1 (yes)