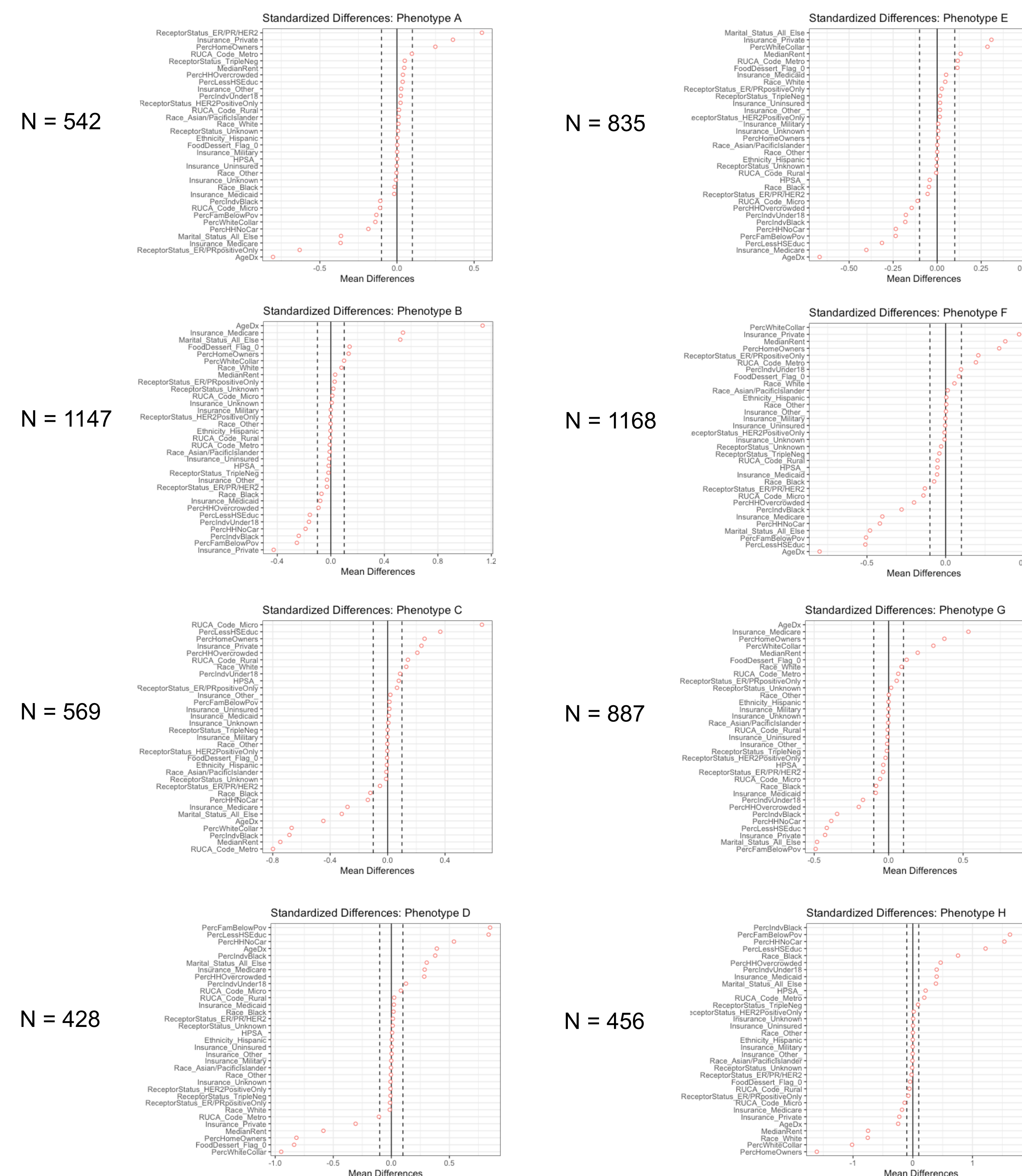
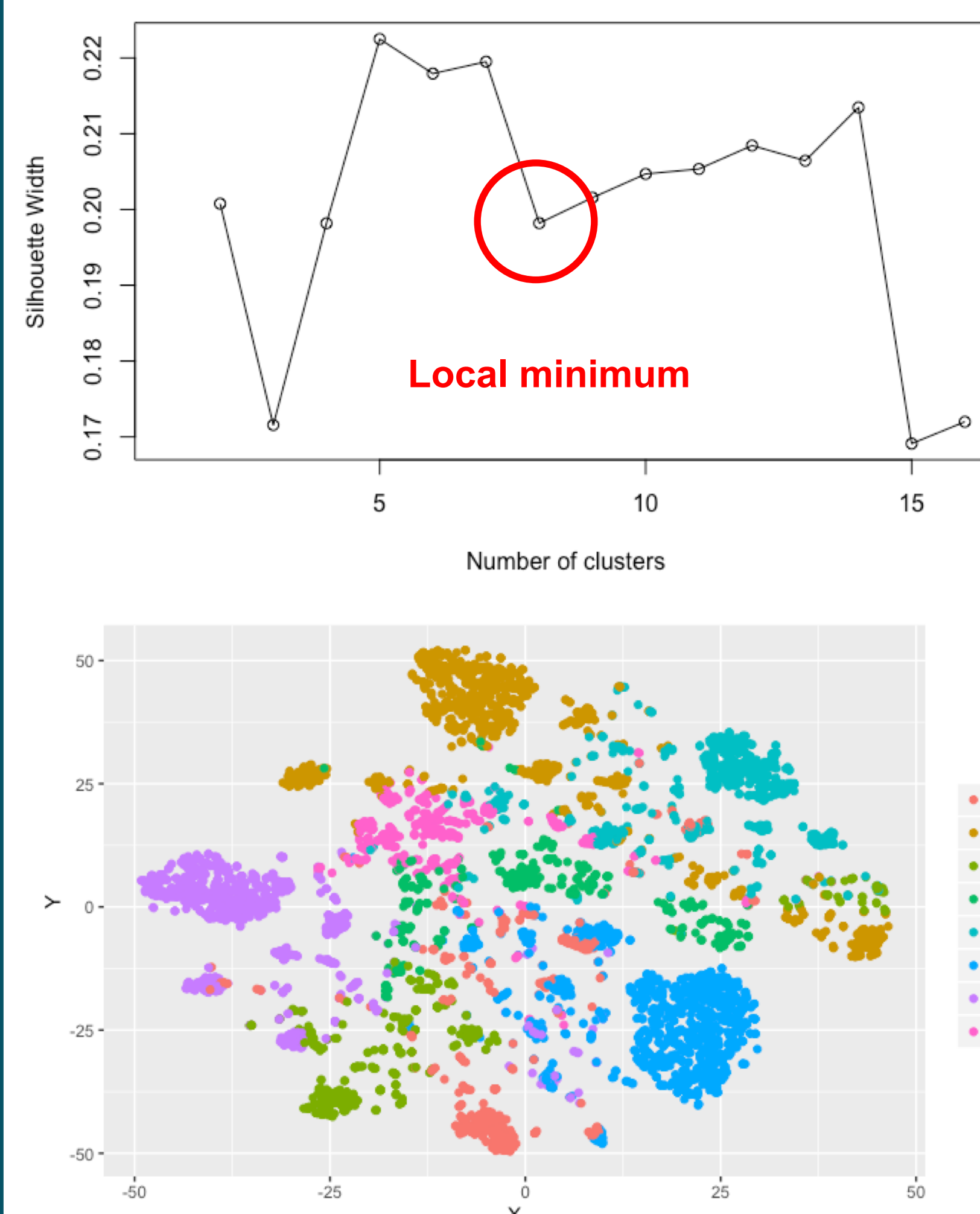


¹Case Comprehensive Cancer Center ²Taussig Cancer Institute

We derived phenotypes associated with advanced disease (regional or distant stage disease) in breast cancer patients using K-medoid clustering, an unsupervised machine learning technique.



- Risk factors associated with advanced disease presentation are multifactorial, occurring at the individual and community levels.
- Therefore, we identified phenotypes associated with advanced breast cancer, an approach that differs from traditional cancer disparities studies that often utilize parametric, regression-based approaches that identify independent risk factors associated with advanced disease.
- Characterizing multilevel phenotypes associated with advanced disease presentation could inform disparities elimination efforts.

- Cleveland Translational Science Collaborative
- Case Comprehensive Cancer Center
- Case Center for Reducing Health Disparities
- Susan G. Komen of Northeast Ohio
- PhRMA Foundation
- UH Cleveland Department of Family and Community Health
- CWRU Prevention Research Center for Healthy Neighborhoods
- CWRU Center for Community Health Integration