Figure 4. Knowledge Dimension: Semantic Isolation of Disease Research

a Semantic Isolation: NTDs vs Other Conditions

Δ = 44%
P = 0.000
d = 1.80

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Semantic Isolation Index (SII)

NTDs (n=15)   Other diseases (n=160)

b Disease Research Semantic Landscape
(Size = Research Volume, Color = Isolation Index)

Conduct disorder
Depressive disorders
Police conflict and executions
Road injuries
Other transport injuries
Neonatal disorders
Stroke
Ischemic heart disease
Hypertensive heart disease
Diabetes mellitus
Endocrine, metabolic, blood, and immune disorders
Chronic obstructive pulmonary disease
Other digestive diseases
Lower respiratory infections
Diarrheal diseases
Leprosy
Tuberculosis
HIV AIDS
Other skin and subcutaneous diseases
Breast cancer
Schistosomiasis
Malaria
Onchocerciasis
Lymphatic filariasis
Trachoma
Leishmaniasis
Chagas disease
African trypanosomiasis
Rabies
Dengue
Yellow fever

UMAP Dimension 2
UMAP Dimension 1

Semantic Isolation Index (SII rank percentile)

Most isolated (high SII)
Neglected tropical diseases
High-burden diseases
Least isolated (low SII)