**1) Chronic Heart Failure in UBKG:**MATCH (a:Concept )-[: CODE]->(b:Code{SAB:'HGNC'})

MATCH (c:Concept )-[: CODE]-(d:Code {SAB:'SNOMEDCT\_US'})-[:PT]-(e:Term)

MATCH (f:Concept )-[: CODE]-(g:Code {SAB:'PUBCHEM'})

MATCH (a)-[r1 {SAB:'LINCS'}]-(f)-[r2:indication {SAB:'IDGD'}]-(c)

WHERE e.name="Chronic heart failure"

RETURN \*;

**Count: 1298**

**Chronic Heart Failure in Condensed-KG:**

MATCH (d:Disease )-[r:indication ]-(c:Compound )-[r1:bioactivity]-(b:Protein )-[r2]-(a:Gene)

WHERE d.node\_label CONTAINS "Chronic heart failure"

RETURN \* ;

**Count: 38**

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**2) Cerebral infarction in UBKG:**

with ['cerebral infarction'] as disease

match (hpo\_concept:Concept)-[:CODE]-(hpo\_code:Code )-[:PT]-(hpo\_term:Term)

match (gene\_concept:Concept)-[:CODE]->(gene\_code:Code)

match (pubchem\_concept:Concept)-[:CODE]->(pubchem\_code:Code

{SAB:'SNOMEDCT\_US'})

match gr=(hpo\_concept)-[r1:associated\_with]-(gene\_concept)-[r2]-(pubchem\_concept)

where hpo\_term.name in disease Return \* ;

**Count: 937144**

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**3) Cerebral Ischemia in Condensed-KG:**

match (c:Compound)-[r:indication]-(d:Disease)

where d.node\_label contains "Cerebral Ischemia"

return \*;

**Count: 3**

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**4) Diabetic retinopathy in UBKG:**

with ['Diabetic retinopathy'] as disease

match (hpo\_concept:Concept)-[:CODE]-(hpo\_code:Code )-[:PT]-(hpo\_term:Term)

match (gene\_concept:Concept)-[:CODE]->(gene\_code:Code)

match (pubchem\_concept:Concept)-[:CODE]->(pubchem\_code:Code)

match gr=(hpo\_concept)-[r1:associated\_with]-(gene\_concept)-[r2]-(pubchem\_concept)

where hpo\_term.name in disease

Return \*

limit 50;

**Count: 654**

**Diabetic retinopathy in Condensed-KG:**

match (c:Compound)-[r1:indication]-(d:Disease)-[r2]-(p:Gene)

match (x:Disease)-[r3]-(e:EFO)

match ab=(c)-[r5]-(x)

where d.node\_label contains "Diabetic Retinopathy"

return count(\*)

**Count: 384**

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**5) Pituitary structure in UBKG:**

match (t:Term)-[:PT]-(c1:Code)-[r]-(c2:Concept)-[r2:expressed\_in]-(c3:Concept

)-[r3]-(c4:Code )

where t.name contains "Pituitary structure"

return \*;

**Count: 34964**

**Pituitary structure in Condensed-KG:**

match (c:Compound)-[r]-(d:Disease)

where d.node\_label contains "Pituitary"

return \* ;

**Count: 24**

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**6) Peptic Ulcer in UBKG:**

with ["Peptic Ulcer"] as disease

match (hpo\_concept:Concept)-[:CODE]-(hpo\_code:Code )-[:PT]-(hpo\_term:Term)

match (gene\_concept:Concept)-[:CODE]->(gene\_code:Code)

match (pubchem\_concept:Concept)-[:CODE]->(pubchem\_code:Code)

match gr=(hpo\_concept)-[r1:associated\_with]-(gene\_concept)-[r2]-(pubchem\_concept)

where hpo\_term.name in disease

Return count(\*)

**Count: 9079195**

**Peptic Ulcer in Condensed-KG:**

match (c:Compound)-[r:indication]-(d:Disease)

where d.node\_label contains "Peptic Ulcer"

return count(\*);

**Count: 27**

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**7) Hyperlipidemia in UBKG:**

MATCH (a:Concept )-[: CODE]->(b:Code{SAB:'HGNC'})

MATCH (c:Concept )-[: CODE]-(d:Code {SAB:'SNOMEDCT\_US'})-[:PT]-(e:Term)

MATCH (f:Concept )-[: CODE]-(g:Code {SAB:'PUBCHEM'})

MATCH (a)-[r1 {SAB:'LINCS'}]-(f)-[r2:indication {SAB:'IDGD'}]-(c)

WHERE e.name="Hyperlipidemia"

RETURN count(\*)

**Count: 700**

**Hyperlipidemia in Condensed-KG:**

match (c:Compound)-[r]-(d:Disease)

where d.node\_label contains "Hyperlipidemia"

return count(\*)

**Count: 32**

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**8) Hypophosphatemia in UBKG:**

MATCH (a:Concept )-[: CODE]->(b:Code{SAB:'HGNC'})

MATCH (c:Concept )-[: CODE]-(d:Code {SAB:'SNOMEDCT\_US'})-[:PT]-(e:Term)

MATCH (f:Concept )-[: CODE]-(g:Code {SAB:'PUBCHEM'})

MATCH (a)-[r1 {SAB:'LINCS'}]-(f)-[r2:indication {SAB:'IDGD'}]-(c)

WHERE e.name="Hypophosphatemia"

RETURN count(\*)

**Count:100**

**Hypophosphatemia in Condensed-KG:**

match (c:Compound)-[r]-(d:Disease)

where d.node\_label contains "Hypophosphatemia"

return count(\*)

**Count:10**

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**9) Neonatal pneumonia in UBKG:**

MATCH (a:Concept )-[: CODE]->(b:Code{SAB:'HGNC'})

MATCH (c:Concept )-[: CODE]-(d:Code {SAB:'SNOMEDCT\_US'})-[:PT]-(e:Term)

MATCH (f:Concept )-[: CODE]-(g:Code {SAB:'PUBCHEM'})

MATCH (a)-[r1 {SAB:'LINCS'}]-(f)-[r2:indication {SAB:'IDGD'}]-(c)

WHERE e.name="Neonatal pneumonia"

RETURN \*

**Count:198**

**Neonatal pneumonia in Condensed-KG:**

match (c:Compound)-[r]-(d:Disease)

where d.node\_label contains "Neonatal pneumonia"

return \*

**Count:4**

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