

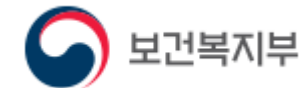


#OpenData4COVID

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Summary of COVID-19 Study w/ HIRA Data

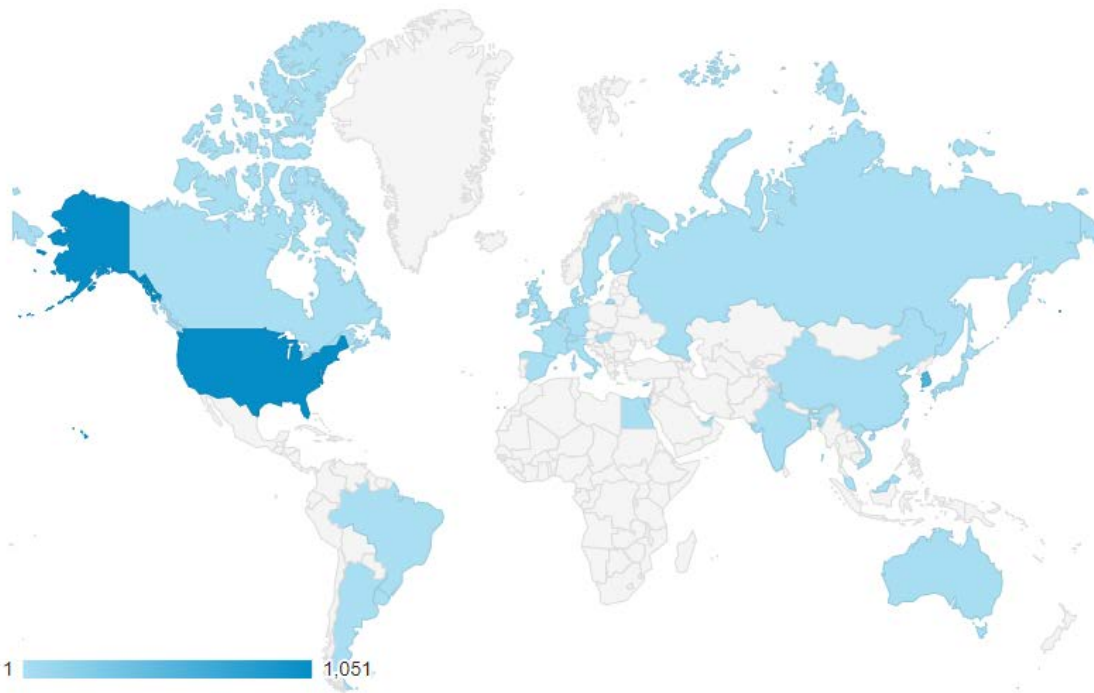
March 29/30, 2020



SUMMARY OF "OPENDATA4COVID19" PROJECT W/ HIRA DATA

WE'VE GOT 1,772 VISITORS FROM 32 COUNTRIES FOR 3 DAYS

- More than 160 individual researchers have registered from 15 countries
- Nearly, 30 research projects are submitted for analysis
(disease characterization, relationship b/w baseline condition and death, relationship baseline drug intake and death, patient-level prediction using machine learning program, etc.)
- Ongoing project





국가	획득		
	사용자	신규 방문자	세션
	1,772 전체 대비 비율 (%) : 100.00% (1,772)	1,772 전체 대비 비율 (%) : 100.00% (1,772)	1,988 전체 대비 비율 (%) : 100.00% (1,988)
1. United States	1,051 (59.31%)	1,051 (59.31%)	1,083 (54.48%)
2. South Korea	575 (32.45%)	575 (32.45%)	734 (36.92%)
3. United Kingdom	24 (1.35%)	24 (1.35%)	27 (1.36%)



SUMMARY OF “OPENDATA4COVID19” PROJECT W/ HIRA DATA

FUTURE CONSIDERATIONS

- Wonderful experience
 - Data update issues
 - Further opportunities
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CHARACTERIZATION OF PATIENTS WITH COVID-19

Covariate Name	HIRA
	Proportion
Age group	
15-19	1.9%
20-24	10.9%
25-29	13.9%
30-34	10.5%
35-39	11.6%
40-44	9.4%
45-49	7.2%
50-54	5.7%
55-59	6.5%
60-64	5.7%
65-69	3.9%
70-74	3.3%
75-79	4.1%
80-84	3.2%
85-89	1.8%
90-94	0.5%
Gender: female	51.9%
Race	
race = Korean	100.0%

Cohort	HIRA	
	Entries	Subjects
COVID ID1 v1	4,123	4,123
Medical history: General		
Chronic liver disease	5.5%	
Chronic obstructive lung disease	3.8%	
Crohn's disease	<0.2%	
Dementia	4.5%	
Depressive disorder	11.7%	
Diabetes mellitus	16.0%	
Gastroesophageal reflux disease	29.8%	
Gastrointestinal hemorrhage	2.7%	
Human immunodeficiency virus infection	<0.2%	
Hyperlipidemia	29.9%	
Hypertensive disorder	21.7%	
Lesion of liver	4.7%	
Obesity	0.3%	
Osteoarthritis	13.6%	
Pneumonia	13.8%	
Psoriasis	1.4%	
Renal impairment	3.9%	
Rheumatoid arthritis	3.3%	
Schizophrenia	1.4%	
Medication use		
Agents acting on the renin-angiotensin system		13.8%
Antibacterials for systemic use		74.4%
Antidepressants		12.5%
Antiepileptics		11.8%
Antiinflammatory and antirheumatic products		63.2%
Antineoplastic agents		3.2%
Antipsoriatics		0.8%
Antithrombotic agents		36.7%
Beta blocking agents		10.6%
Calcium channel blockers		14.0%
Diuretics		10.4%
Drugs for acid related disorders		66.5%
Drugs for obstructive airway diseases		24.9%
Drugs used in diabetes		9.7%
Immunosuppressants		2.9%
Lipid modifying agents		16.8%
Opioids		65.8%
Psycholeptics		29.7%
Psychostimulants, agents used for adhd and nootropics		8.2%

Led by Edward Burn (Oxford University, UK)

COMPARISON OF CLINICAL OUTCOME BETWEEN ANTI-HYPERTENSIVE MEDICATIONS

Evidence Explorer

Target
 Prevalent ARB user as monotherapy for HTN within 30 days before COVID-19 diagnosis

Comparator
 Prevalent dCCB user as monotherapy for HTN within 30 days before COVID-19 diagnosis

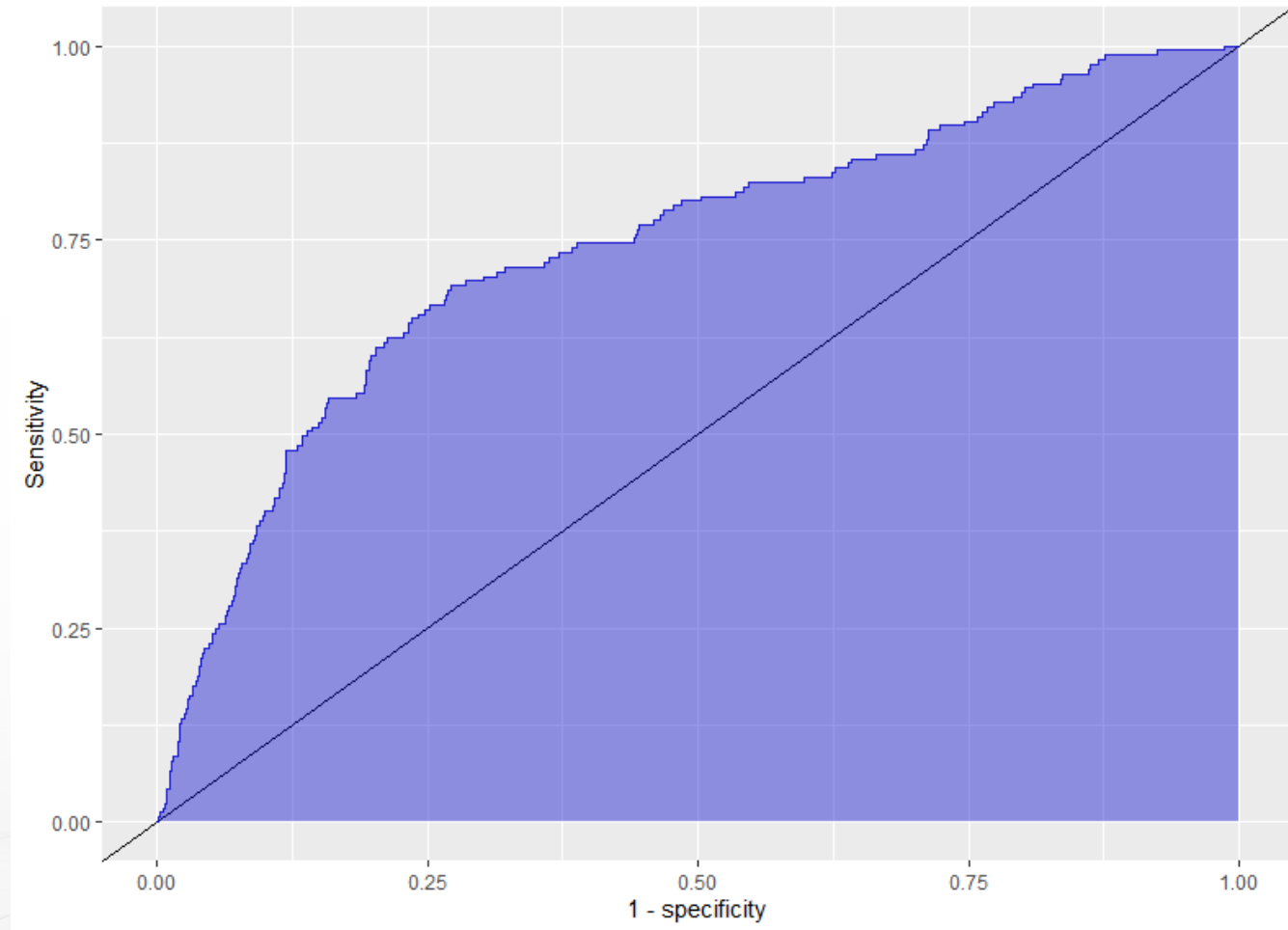
Outcome
 All-cause mortality

Show 15 entries

Analysis	Data source	HR	LB	UB	P
Without PS adjustment-Logistic (age/gender/year/month)	HIRA	1.21	0.14	10.32	0.86
Without PS adjustment-Cox (age/gender/year/month)	HIRA	1.21	0.15	10.07	0.86
Minimum PS stratification -Cox	HIRA	1.21	0.15	10.07	0.86
Minimum PS stratification -Logistic	HIRA	1.21	0.14	10.05	0.86
Full PS stratification -Cox	HIRA	1.21	0.15	10.07	0.86
Full PS stratification -Logistic	HIRA	1.21	0.14	10.05	0.86
Unadjusted with all demographic covariates (+14 / logistic)	HIRA	2.42	0.23	52.80	0.52

Showing 1 to 7 of 7 entries

PREDICTION OF HOSPITALIZATION AMONG PATIENTS SYMPTOMS RELATED WITH VIRAL INFECTION OR DIAGNOSIS OF COVID-19



Led by Peter Rijnbeek (Erasmus University, Netherland)



Thank you!