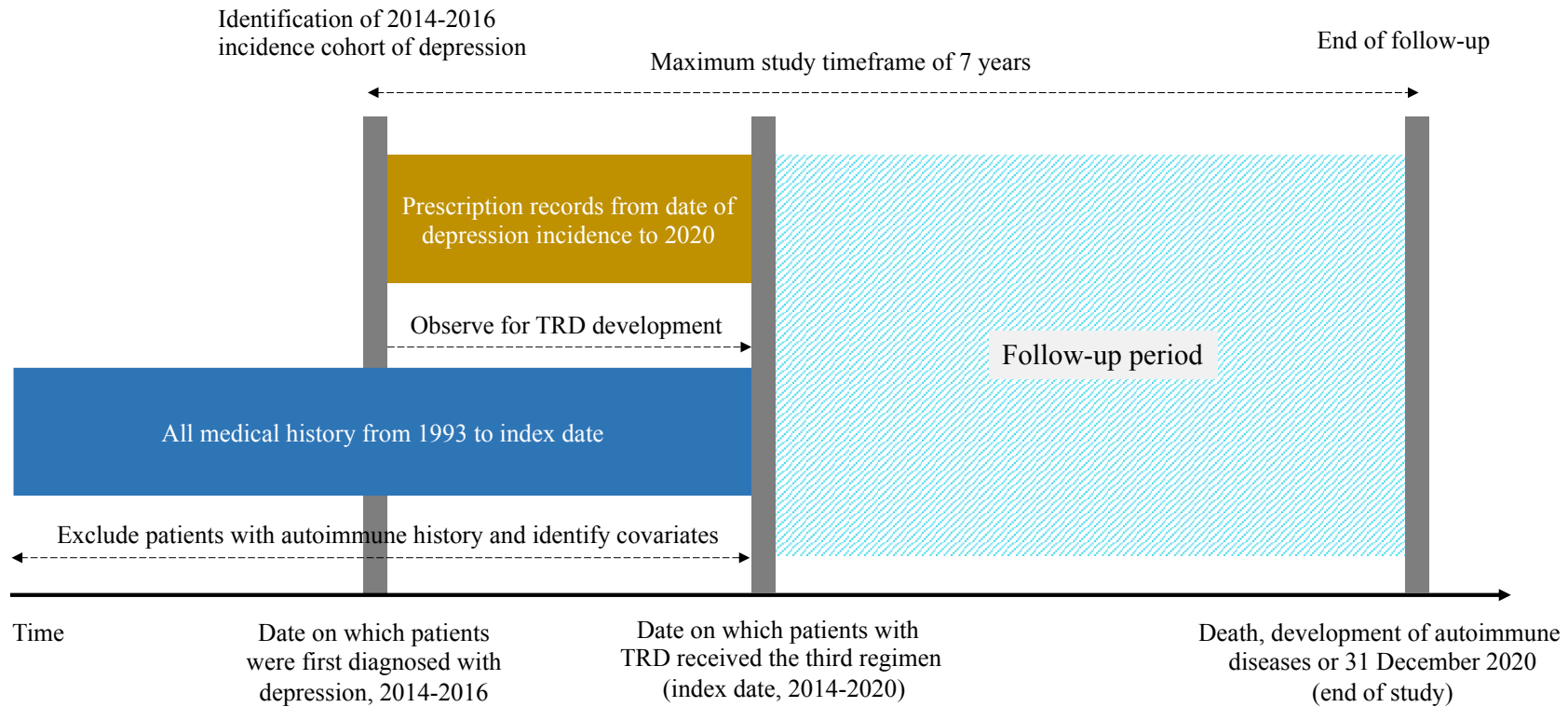
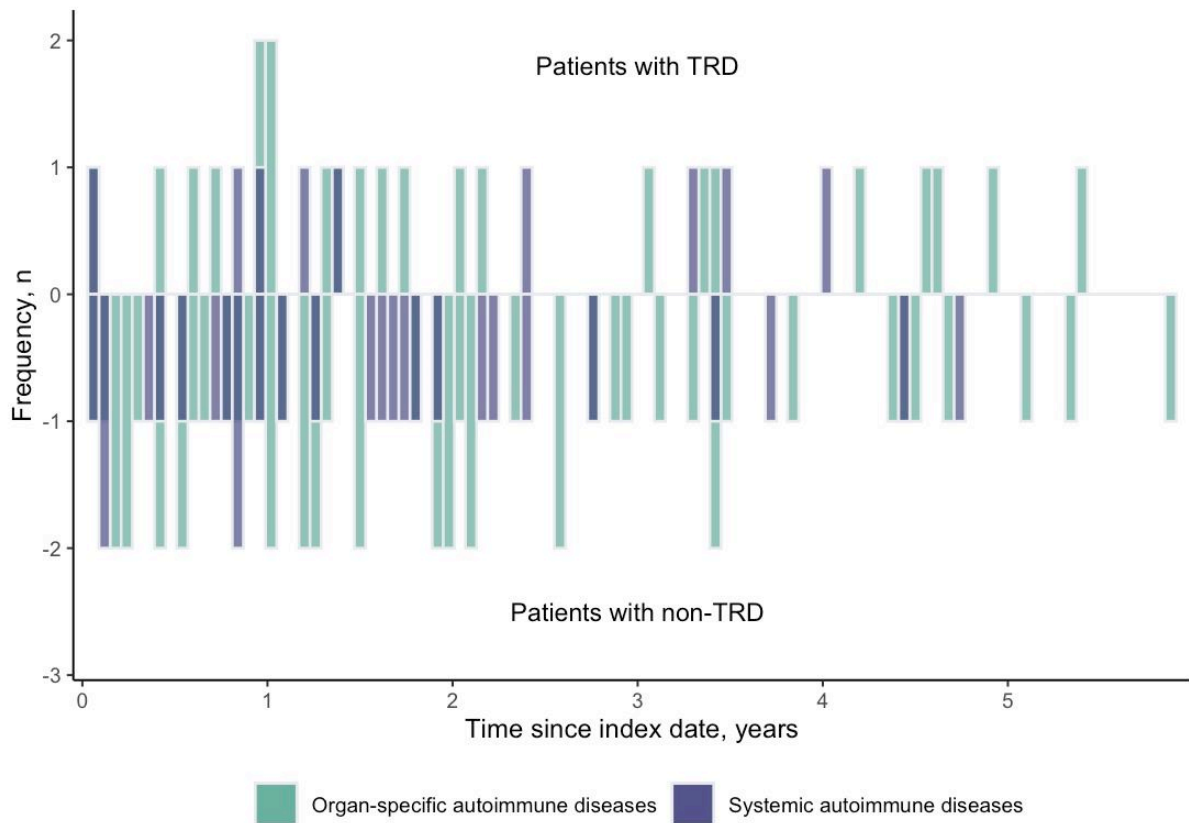


Supplementary Figure 1. Schematic presentation of cohort study design



Non-TRD patients did not have the third regimen. Index dates of their matched TRD patients in the same matching stratum were assigned. Abbreviation: TRD – Treatment-resistant depression.

Supplementary Figure 2. Onset distribution of autoimmune diseases among patients with and without TRD in the retrospective cohort study



Abbreviation: TRD – Treatment-resistant depression.

Supplementary Table 1. List of ICD-9-CM codes for diagnoses of depression, autoimmune diseases, and medical history

Diseases / Conditions	ICD-9-CM codes
Depression¹	
Major depressive disorder, single episode	296.2
Major depressive disorder, recurrent episode	296.3
Dysthymic disorder	300.4
Depressive disorder, not elsewhere classified	311
Organ-specific autoimmune diseases²⁻⁸	
Inflammatory bowel diseases	555-556
Ankylosing spondylitis / Spondylarthritis	720.0
Psoriasis	696
Insulin-dependent diabetes mellitus (IDDM)	250.x1, 250.x3, where x = 0-9
Hashimoto's thyroiditis	245.2
Graves' disease	242.00, 242.01
Coeliac disease	579.0
Vitiligo	709.01
Alopecia areata	704.01
Pemphigus vulgaris	694.4
Dermatitis herpetiformis	694.0
Pernicious anaemia	281.0
Immune thrombocytopenic purpura	287.31
Iridocyclitis	364.0-364.3
Pemphigoid	694.5, 694.6
Systemic autoimmune diseases^{2,3,9}	
Systemic lupus erythematosus	710.0
Rheumatoid arthritis	714.0-714.9
Sjogren disease	710.2
Systemic sclerosis	710.1
Polymyositis/dermatomyositis	710.3-710.4
Multiple sclerosis	340
Juvenile arthritis	714.30, 714.33
Physical disorders	
Obesity	278
Hypertensive diseases	401-405
Non-Insulin-dependent diabetes mellitus (NIDDM)	250.x0, 250.x2, where x = 0-9
Any cardiovascular diseases	
- Ischaemic heart disease	410-414
- Cerebrovascular disease	430-434, 436-438
- Emboli and thrombosis	415, 444, 445
- Heart failure	428
- Arrhythmia / conduction disorder	426-427
Any tumours	
- Non-metastatic solid tumours	140-172, 174-195
- Metastatic solid tumours	196-199
Psychiatric disorders^{1,10-12}	
Attention-deficit-hyperactivity disorder	314
Autism	299.0
Psychosis	297, 298
Schizophrenia	295
Epilepsy	345
Anxiety disorder	300.0, 293.84

Diseases / Conditions	ICD-9-CM codes
Personality disorder	301
Substance use disorders	292, 304.0-304.93, 305.1-305.93
Dementia	290
Bipolar disorder	296.0, 296.1, 296.4-296.8
Obsessive-compulsive disorder	300.3
Eating disorder	307.1, 307.51

Abbreviation: ICD-9-CM – International Classification of Diseases, 9th Revision, Clinical Modification.

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