

Supplementary Table 1: Psychiatric comorbidities among Multiple Myeloma Patients Included in the Study Cohort

Psychiatric Diagnosis Classification (ICD 9 Codes)	N (%) Out of 15,168 MM+Psychiatric Patients in the Study
Adjustment disorders (309.0-1, 309.22-24, 309.28-29, 309.3-4, 309.82-83, 309.89, 309.9)	580 (3.8%)
Anxiety disorders (293.84, 300.00-02, 300.09-10, 300.20-23, 300.29, 300.3, 300.5, 300.89, 300.9, 308.0-4, 308.9, 309.81, 313.0-1, 313.21-22, 313.3, 313.82-.83)	2062 (13.6%)
Attention-deficit, conduct, and disruptive behavior disorders (312.00-03, 312.10-13, 312.20-23, 312.4, 312.8, 312.81-82, 312.89, 312.9, 313.81, 314.00-01, 314.1-2, 314.8-9)	32 (0.2%)
Delirium, dementia, and amnestic and other cognitive disorders (290.0, 290.10-13, 290.20-21, 290.3, 290.40-43, 290.8-9, 293.0-1, 294.0-1, 294.10-11, 294.20-21, 294.8-9, 310.0, 310.2, 310.83, 10.81, 310.89, 310.9, 331.0-1, 331.11, 331.19, 331.2, 331.82, 797)	2480 (16.4%)
Developmental disorders (307.0, 307.9, 315.00-02, 315.09, 315.1-2, 315.31-32, 315.34-35, 315.39, 315.4-5, 315.8-9, 317, 318.0-2, 319, V400-1)	204 (1.3%)
Disorders usually diagnosed in infancy, childhood, or adolescence (299.00-.01, 299.10-.11, 299.80-.81, 299.90-91, 307.20-23, 307.3, 307.6-7, 309.21, 313.23, 313.89-9)	18 (0.1%)
Impulse control disorders, NEC (312.30-35, 312.39)	<11 (<0.1%)
Mood disorders (293.83, 296.00-06, 296.10-16, 296.20 -26, 296.30-36, 296.40-46, 296.50-56, 296.60-66, 296.7, 296.80-82, 296.89-90, 296.99, 300.4, 311)	4939 (32.6%)

Personality disorders (301.0, 301.10-13, 301.20-22, 301.3-4, 301.50-51, 301.59, 301.6-7, 301.81-84, 301.89, 301.9)	23 (0.2%)
Schizophrenia and other psychotic disorders (293.81-82, 295.00-05, 295.10-15, 295.20-25, 295.30-35, 295.40-45, 295.50-55, 295.60-65, 295.70-75, 295.80-85, 295.90-95, 297.0-3, 297.8-9, 298.0-4, 298.8-9)	1714 (11.3%)
Alcohol-related disorders (291.0-.5, 291.8, 291.81-82, 291.89, 291.9, 303.00-03, 303.90-93, 305.00-03, 357.5, 425.5, 535.30-31, 571.0.3, 760.71, 980.0)	451 (3.0%)
Substance-related disorders (292.0, 292.11-12, 292.2, 292.81-85, 292.89, 292.9, 304.00-03, 304.10-13, 304.20-23, 304.30-33, 304.40-43, 304.50-53, 304.60-63, 304.70-73, 304.80-83, 304.90-93, 305.20-23, 305.30-33, 305.40-43, 305.50-53, 305.60-63, 305.70-73, 305.80-83, 305.90-93, 648.30-34, 655.50-51, 655.53, 760.72-73, 760.75, 779.5, 965.00-02, 965.09, V6542)	616 (4.1%)
Suicide and intentional self-inflicted injury (E9500-511, E9518, E9520-521, E9528-531, E9538-539, E954, E9550-557, E9559, E956, E9570-572, E9579-589, E959, V6284)	0 (0.0%)
Screening and history of mental health and substance abuse codes (305.1, 305.10-13, 333.92, 535.3, 790.3, V110-114, V118-119, V154, 1541-1542, V1549, V1582, V6285, V663, V701-702, V7101-7102, V7109, V790-793, V798-799)	1338 (8.8%)
Miscellaneous mental health disorders (293.89, 293.9, 300.11-16, 300.19, 300.6-7, 300.81-82, 302.1-4, 302.50-53, 302.6, 302.70-76, 302.79, 302.81-85, 302.89, 302.9, 306.0-4, 306.50, 306.51-53, 306.59, 306.6-9, 307.1, 307.40-54, 307.59, 307.80-81, 307.89, 310.1, 316, 648.40-44, V402-403, V4031, V4039, V409, V673)	707 (4.7%)

Supplementary Table 2: Psychiatric Diagnoses with ICD 9.0 Codes Included in the MM+Depression Analysis

Psychiatric Diagnosis Group	ICD 9 Codes
Major depressive disorder	296.2-296.3
Neurotic depression	300.4
Brief depressive reaction	309.0
Depressive disorder, not otherwise classified	311