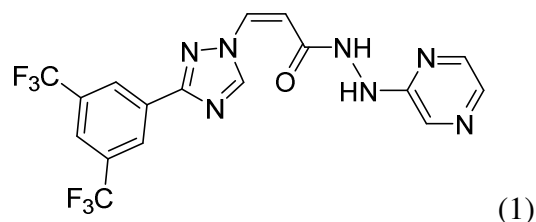


subject a therapeutically effective amount of a compound represented by structural formula (1) or a pharmaceutically acceptable salt thereof



only if the subject is determined to be a responder to a therapy by the compound represented by structural formula (1) based on said plurality of protein activity values.

[0047] In a first aspect of the first through fourth example embodiments, the set of proteins is selected from IRF3, ARL2BP, ZBTB17, ATRX, MPP7, TDP2, ATF1, FBXW11, C1D, PKD1, GDI2, SUPT5H, SHOC2, RBCK1, ZNF598, ZNF697, PRKACB, SIRT7, RPS6KB1, RAB1A, ZNF575, MBTD1, ZNF24, TBL3, MYBBP1A, CELSR1, SETD1A, TP53, CASP8AP2, ZNF28, STK11, SMARCA4, SIRT1, ZNF324B, ZNF532, MBD3, ZFYVE16, CSDE1, IFT27, PER1, FBXO11, CREG1, DEDD, DVL1, TERF2IP, ZC3H7A, TYK2, CSNK1G2, SCARB1, E4F1, HSBP1, ZCCHC9, BCKDK, PRKD2, CENPB, FBXW7, ZNF688, UBE2D3, SIGIRR, IKBKE, MED25, ASB7, H3F3A, CRTCL1, FLYWCH1, AHCTF1, ESRRA, NFKBIB, ZNF616, CDK3, PPP1R15A, AKT1S1, ARID4B, SETD1B, ERO1L, TCEANC2, MAP3K11, PSMB10, PRKCSH, ZNF358, ZNF493, PPM1A, MAPK8IP3, JRKL, AGPAT2, HIST1H1C, WASF2, C14orf169, RIN2, EED, ZNF579, SCAI, MYBL2, DDX20, CLN3, HIRA, ZC4H2, XPR1, PUF60, and HOXB2.

[0048] In a second aspect of the first through fourth example embodiments, the set of proteins is IRF3, ARL2BP, ZBTB17, and ATRX.

[0049] In a third aspect of the first through fourth example embodiments and all aspects thereof, the method further comprises collecting a bone marrow sample from the subject; separating the CD138+ cells in the bone marrow sample; and identifying the activity pattern of the MR proteins in the CD138+ cells.

[0050] In a fourth aspect of the first through fourth example embodiments and all aspects thereof, the multiple myeloma is a refractory multiple myeloma.

[0051] In a fifth aspect of the first through fourth example embodiments and all aspects thereof, the subject has received from 1 to 7 prior therapies, for example, the subject has received at least two prior therapies, or at least three prior therapies.