

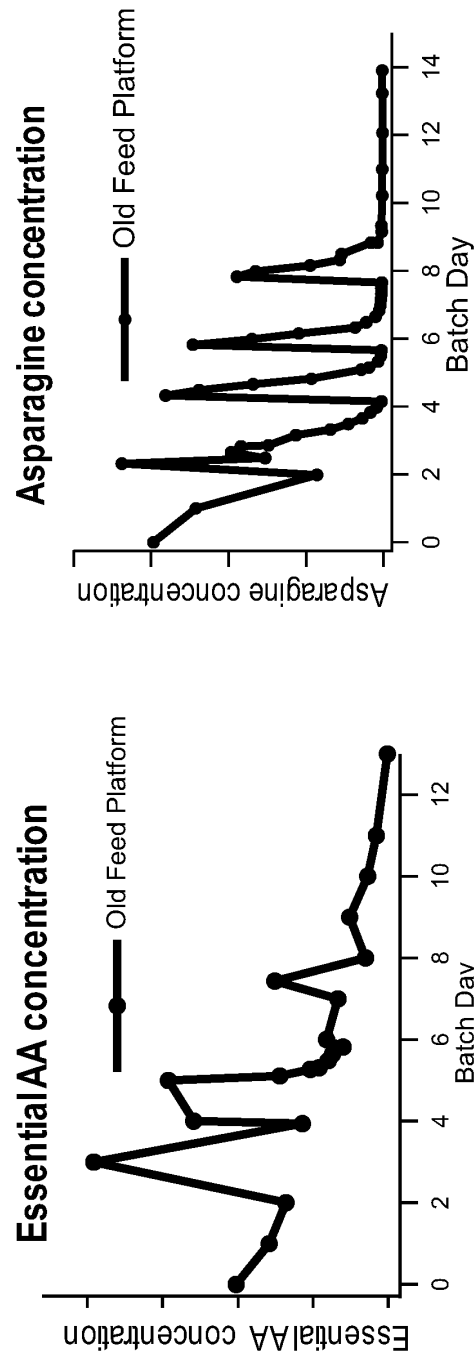


FIG. 1B

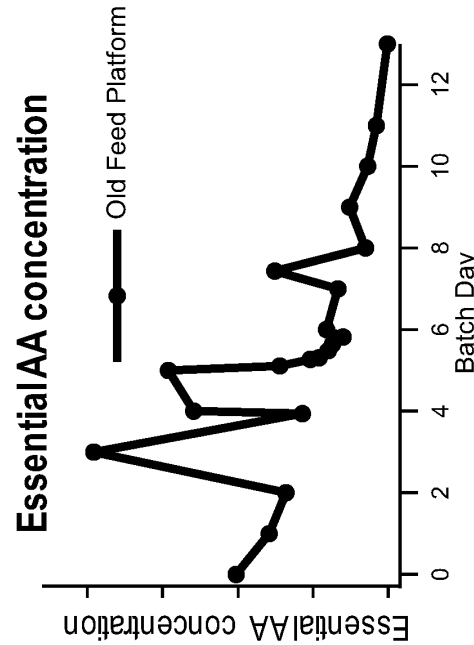


FIG. 1A

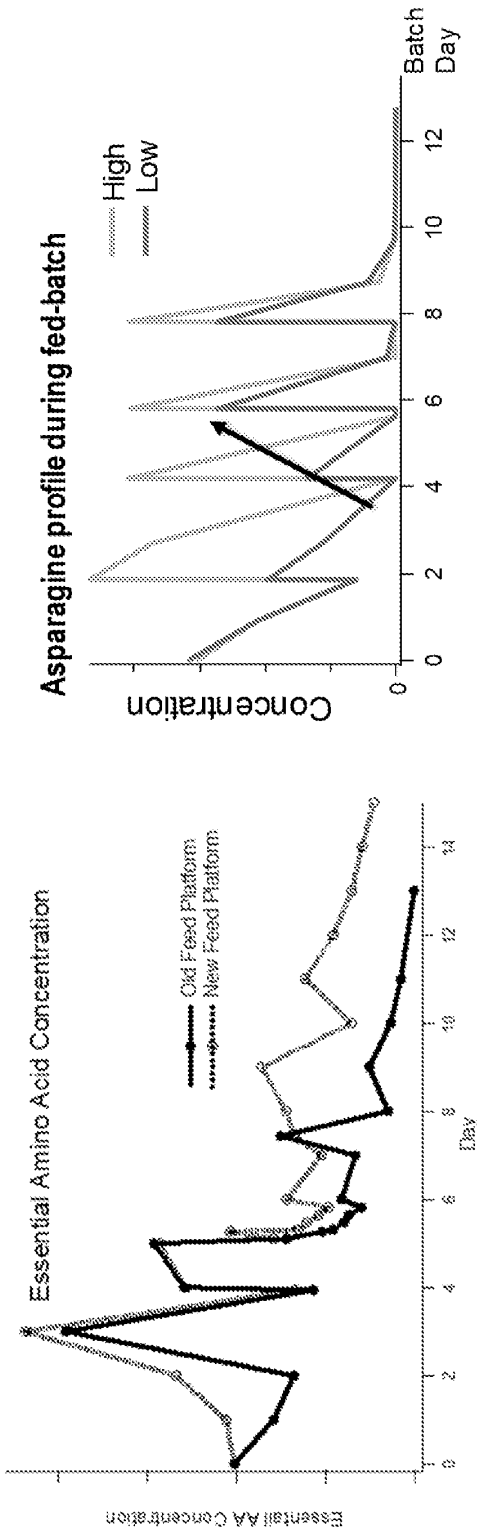


FIG. 2A

FIG. 2B

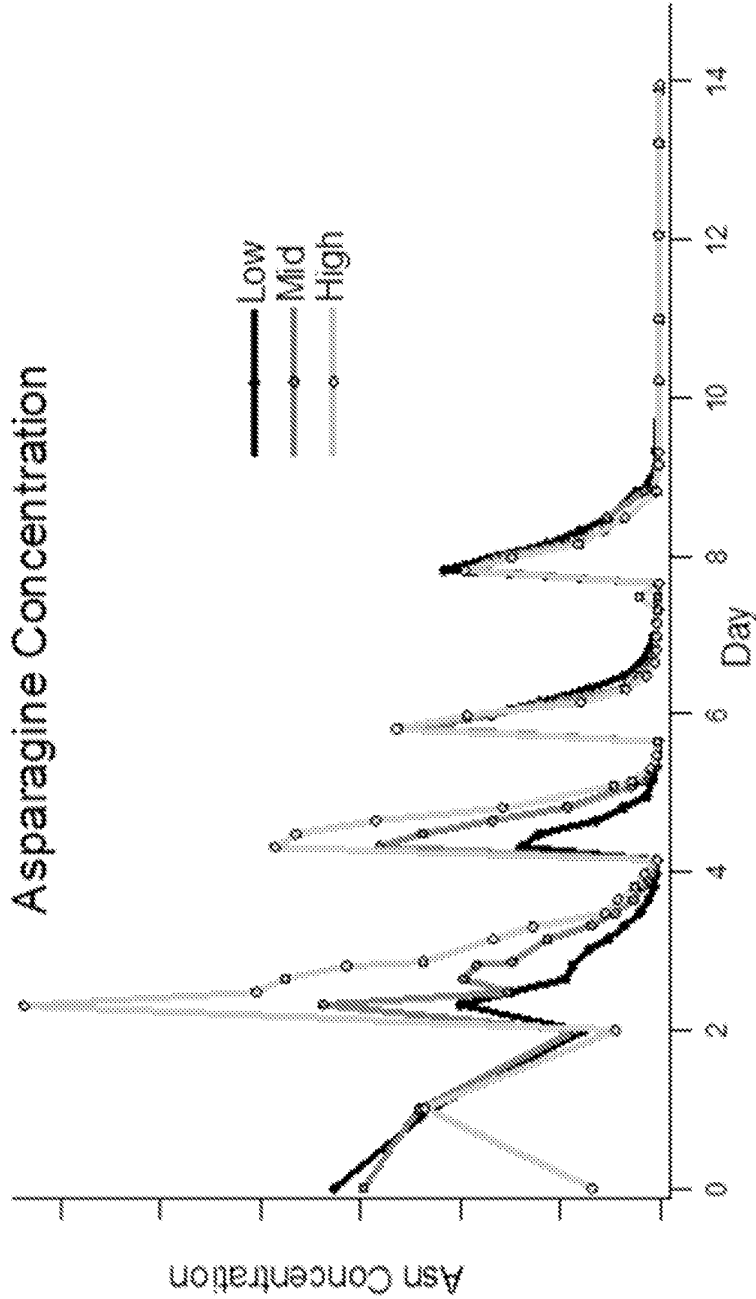


FIG. 3A

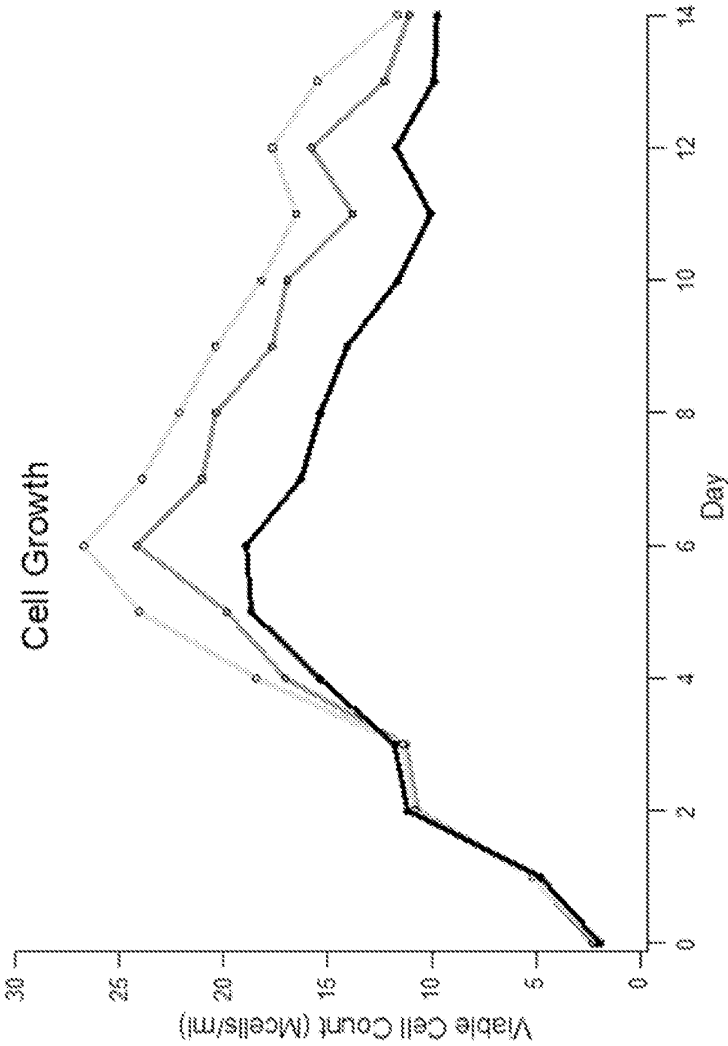


FIG. 3B

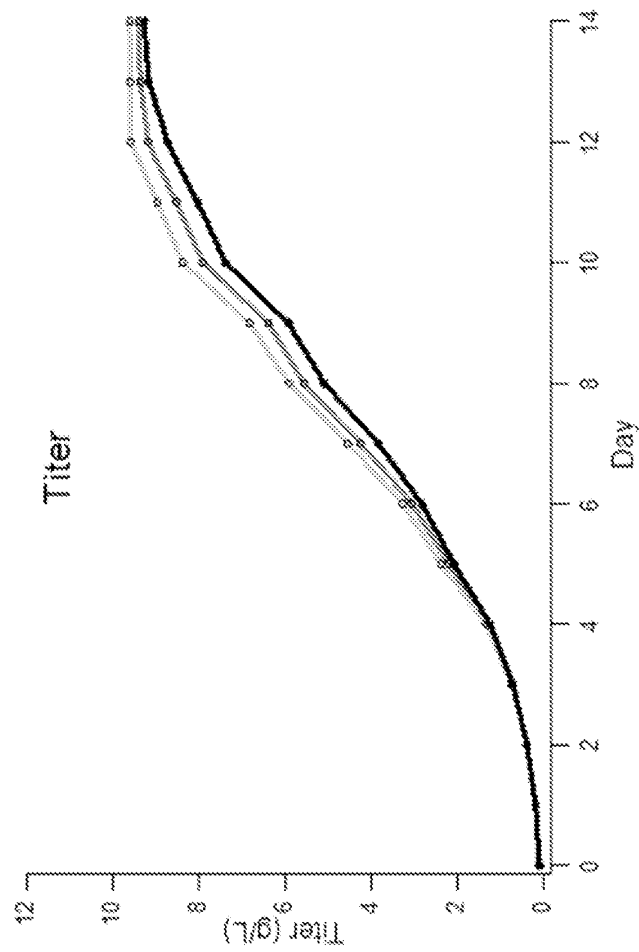


FIG. 3C

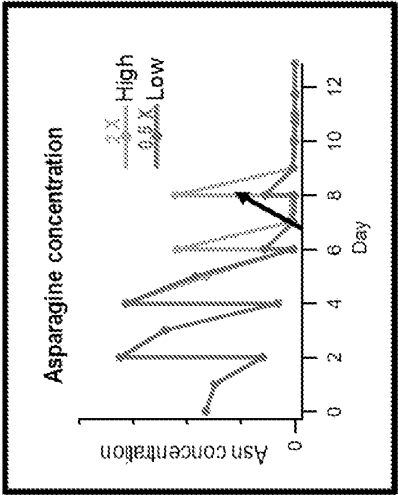


FIG. 4A

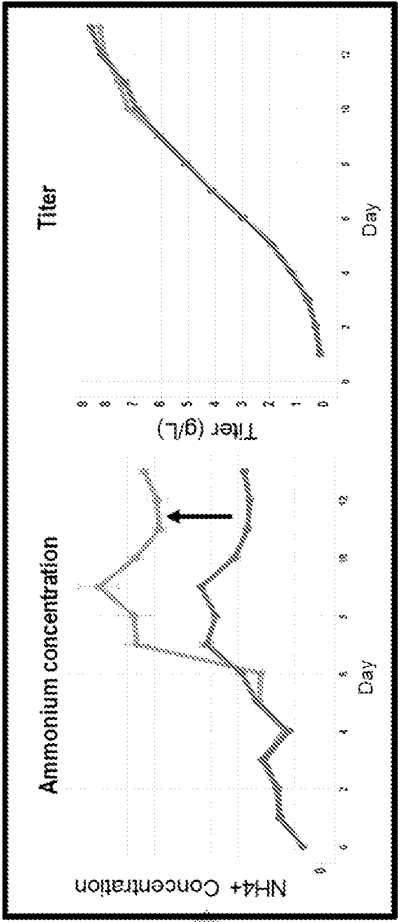


FIG. 4B

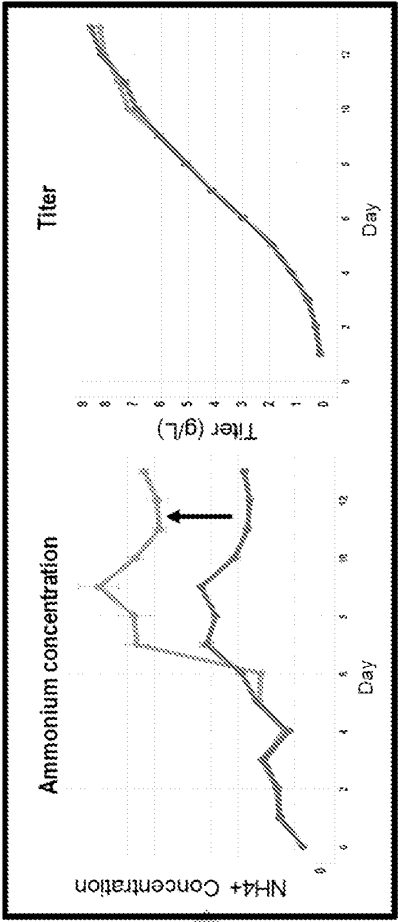


FIG. 4C

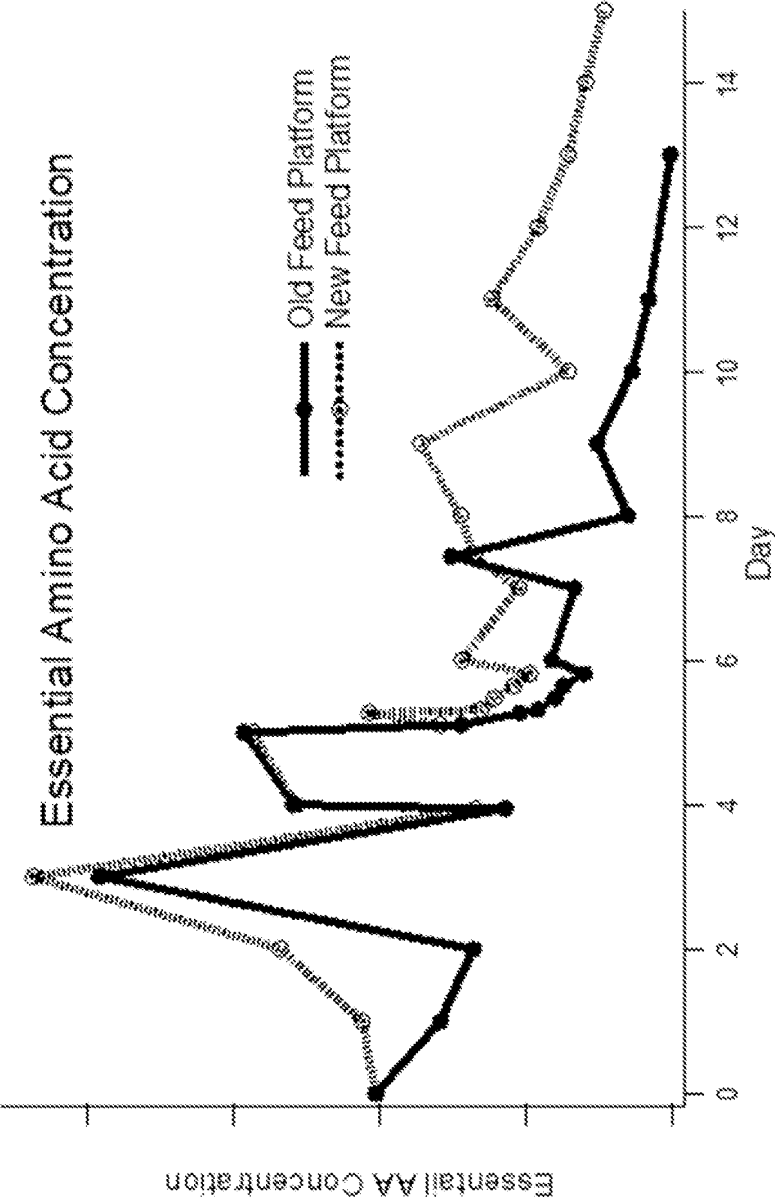


FIG. 5A

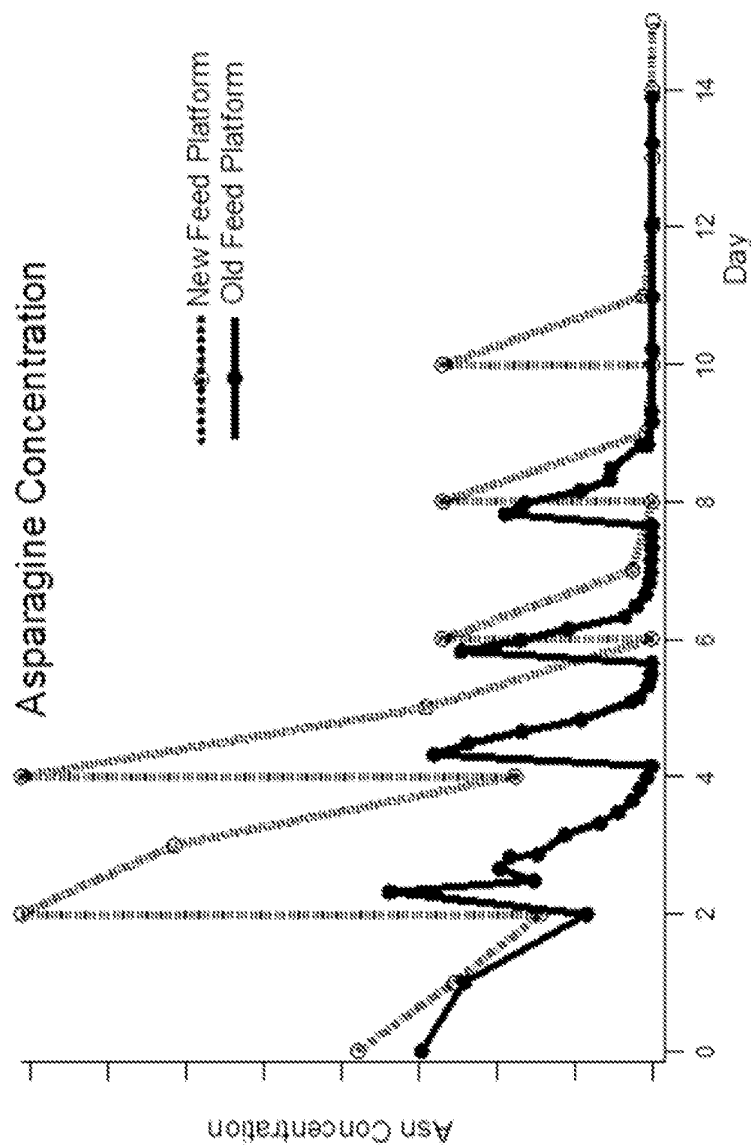


FIG. 5B

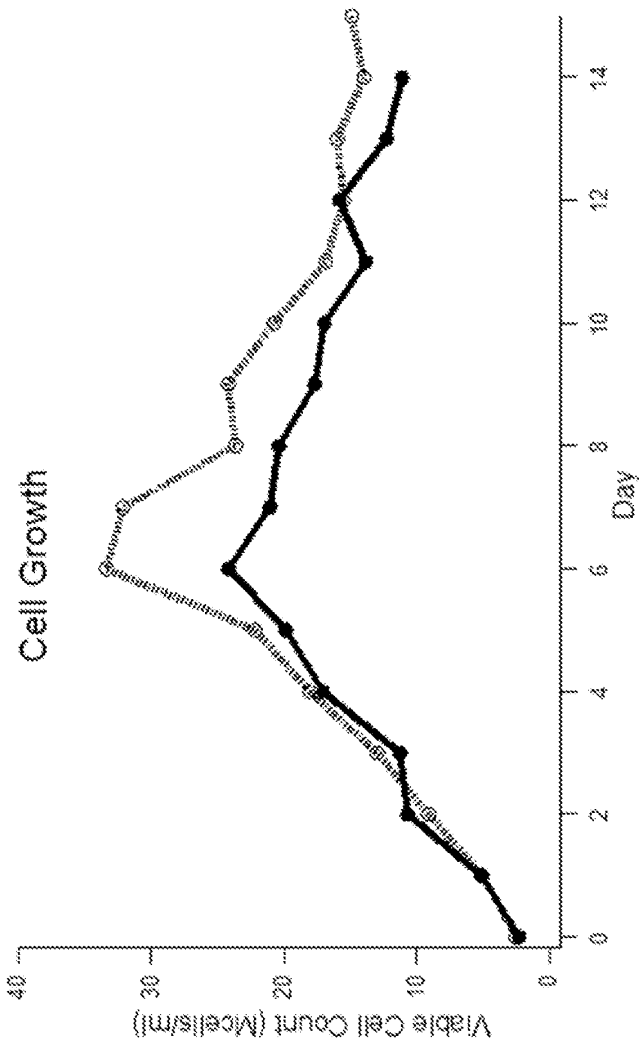


FIG. 5C

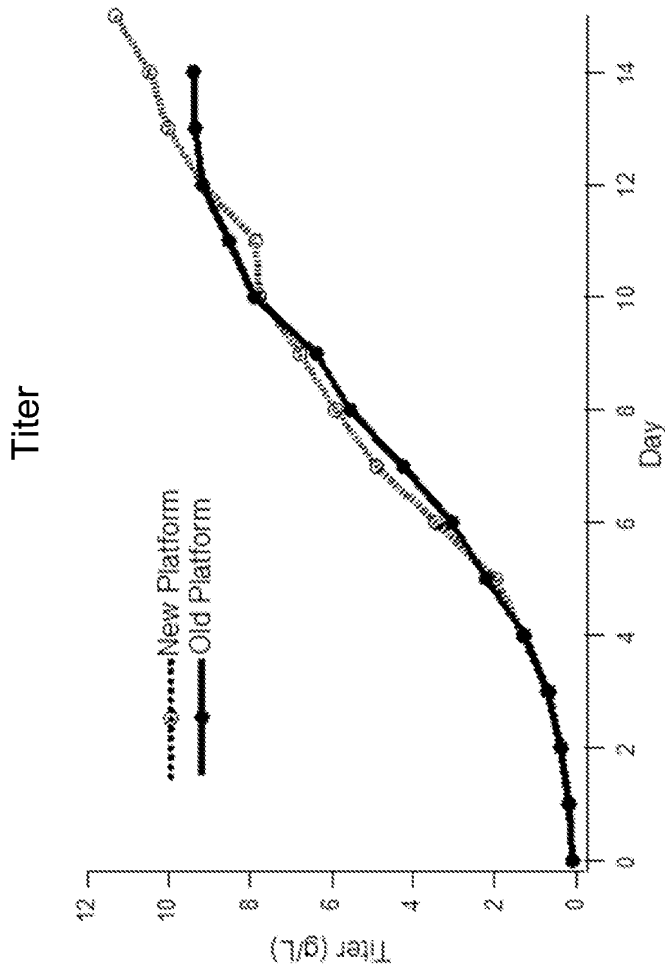


FIG. 5D

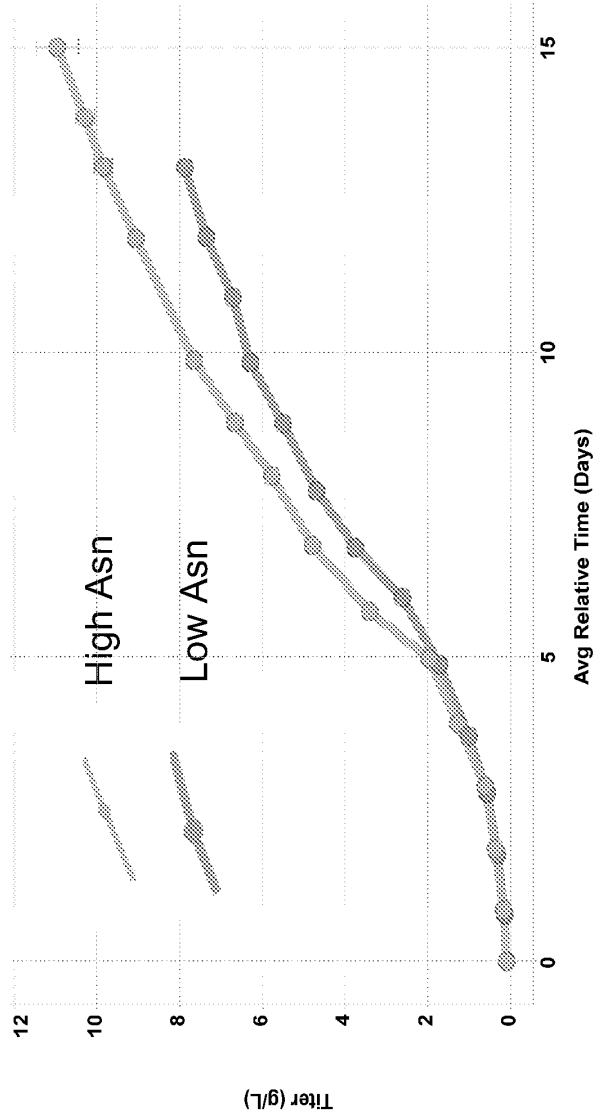


FIG. 5E

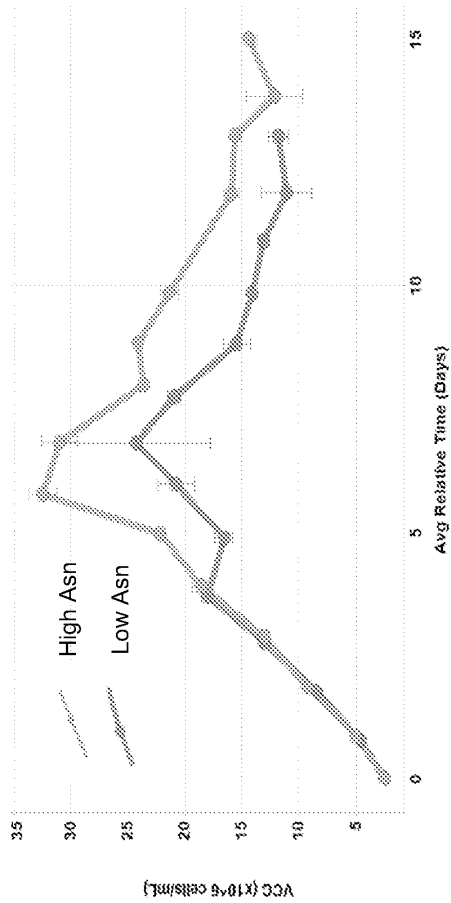


FIG. 5F

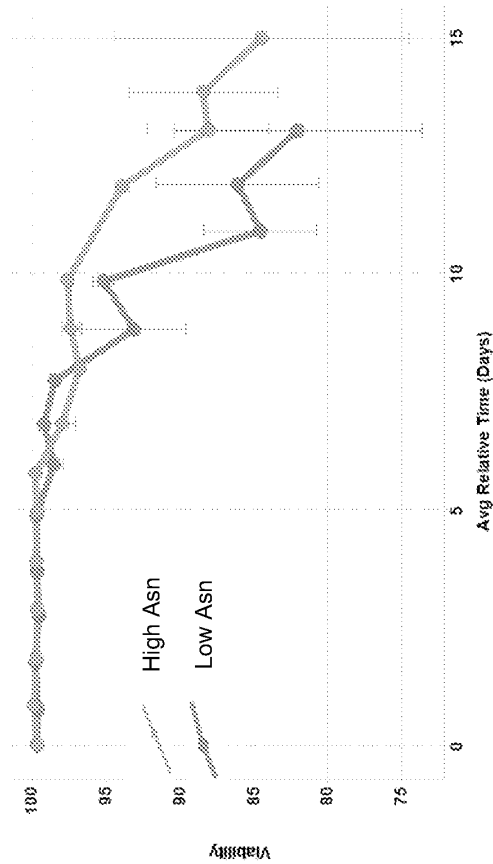


FIG. 5G

Asparagine concentrations in late feeds

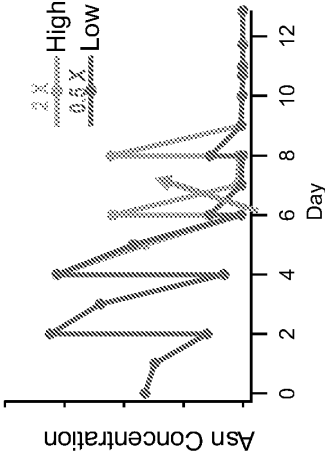


FIG. 6B

Asparagine concentrations in early feeds

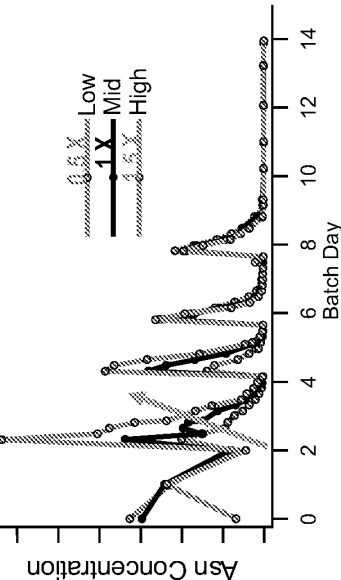


FIG. 6A

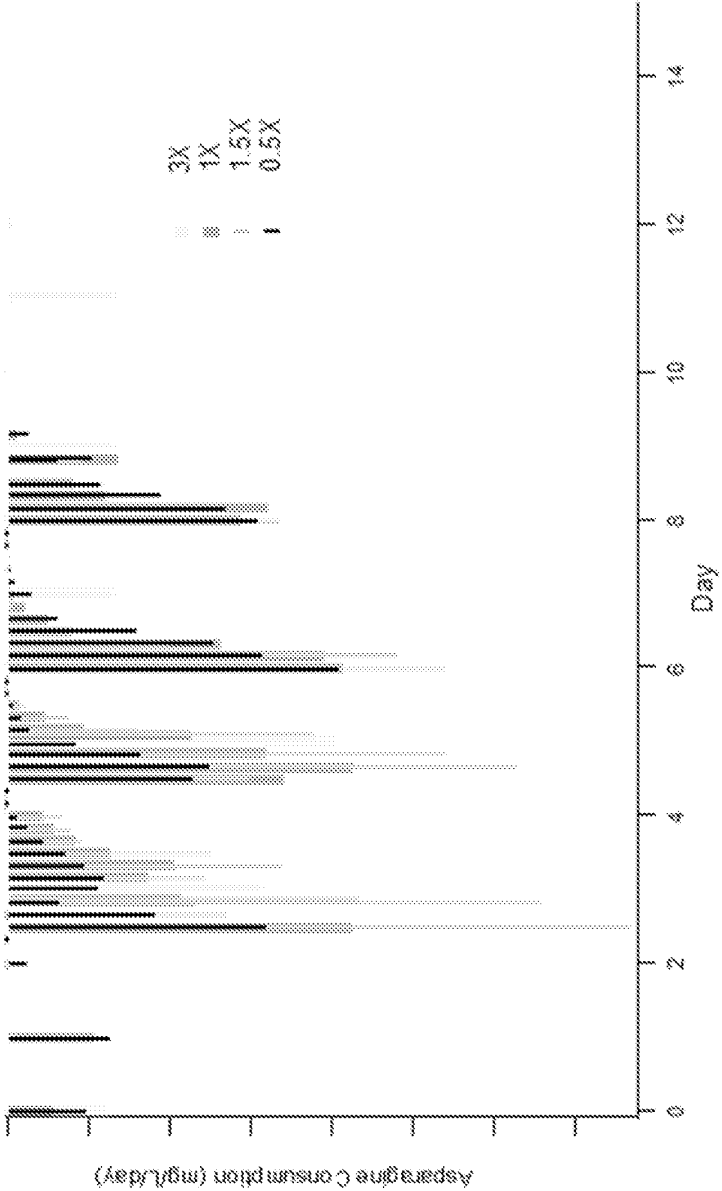


FIG. 7

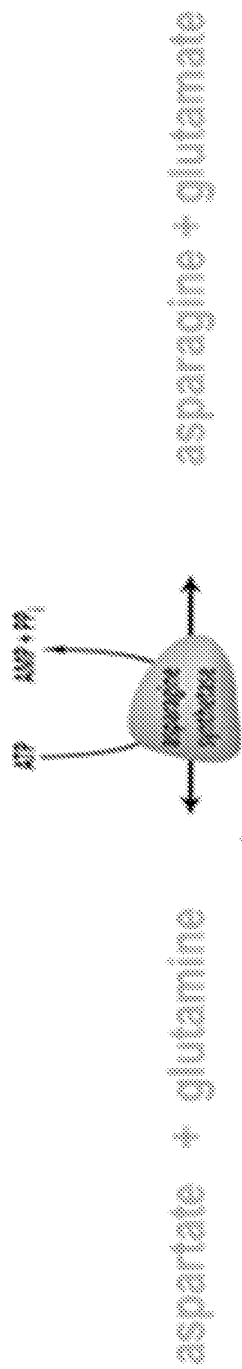


FIG. 8

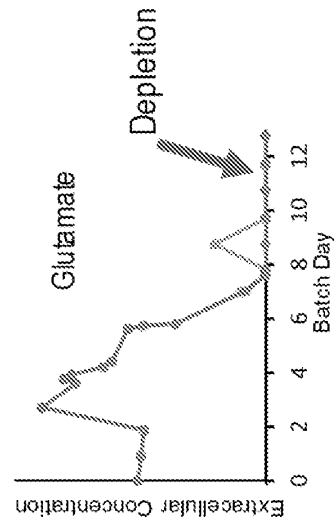


FIG. 9B

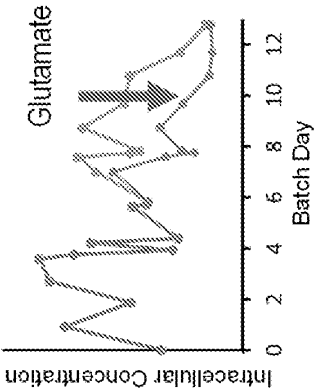


FIG. 9D

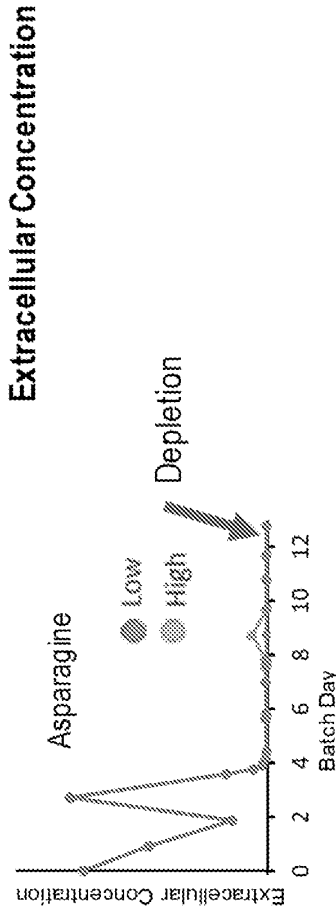


FIG. 9A

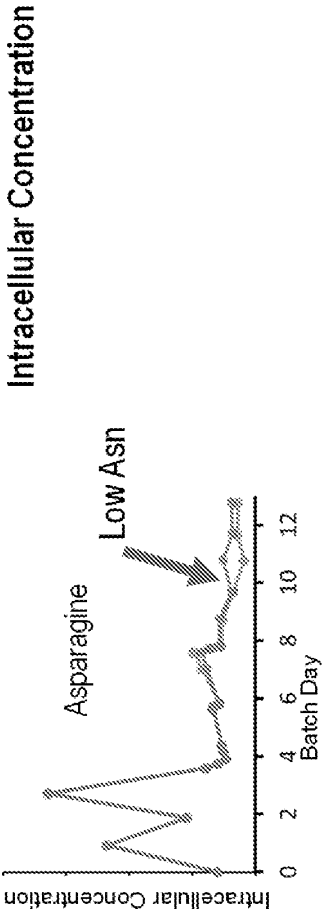


FIG. 9C

Extracellular Concentration

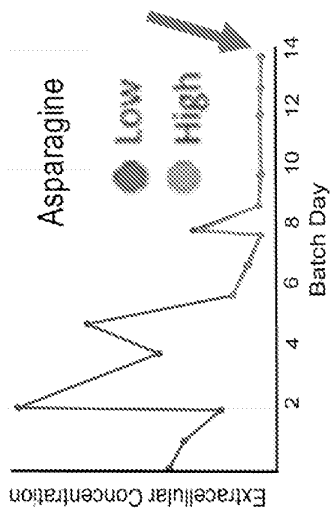


FIG. 10A

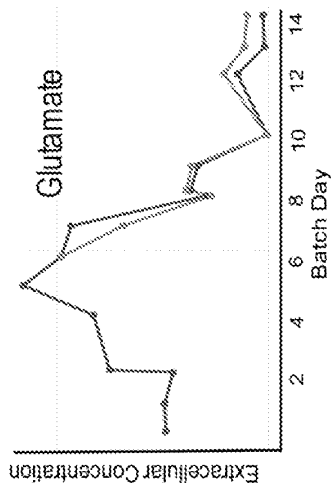


FIG. 10B

Intracellular Concentration

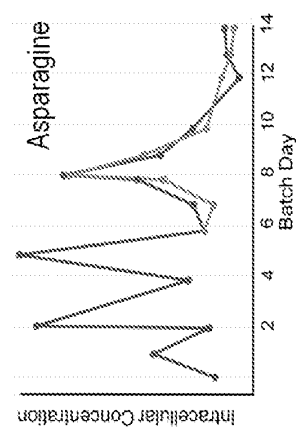


FIG. 10C

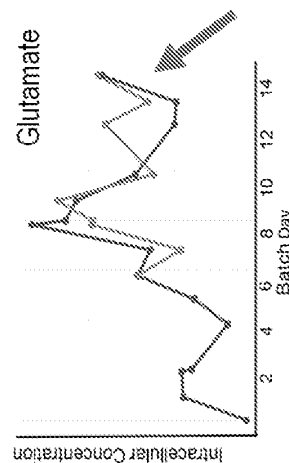


FIG. 10D

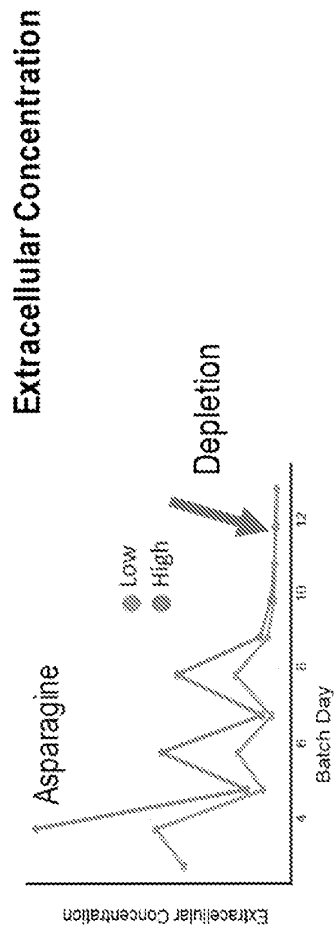


FIG. 11A

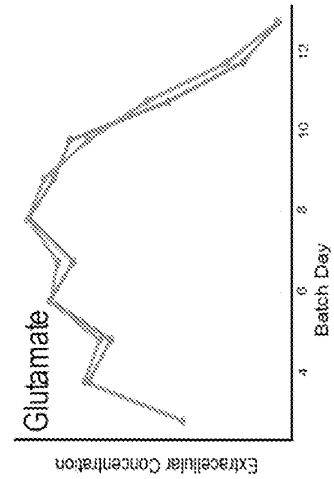


FIG. 11B

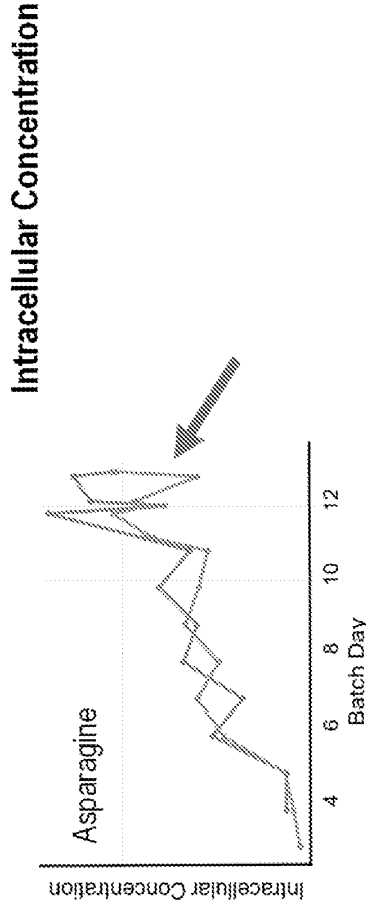


FIG. 11C

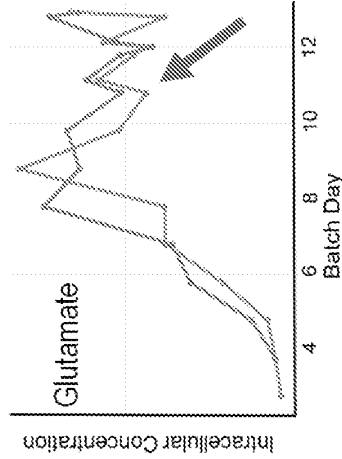


FIG. 11D

FIG. 12A

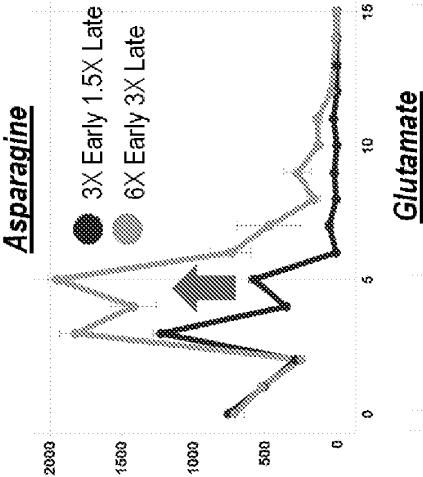


FIG. 12B

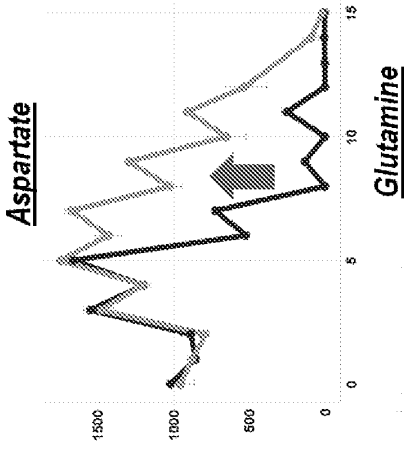


FIG. 12C

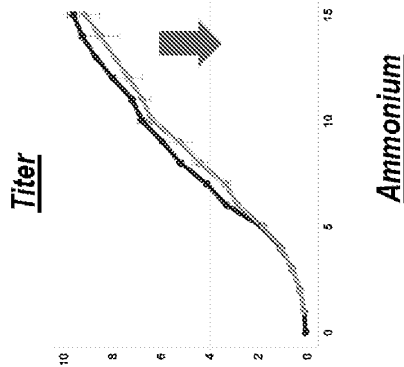


FIG. 12D



FIG. 12E

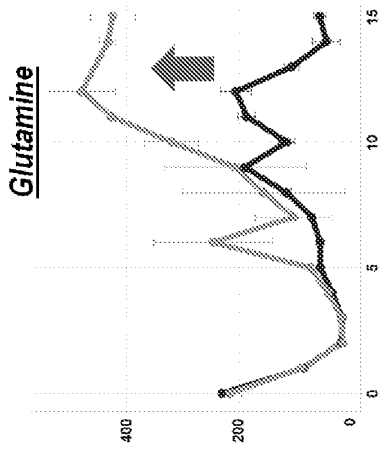
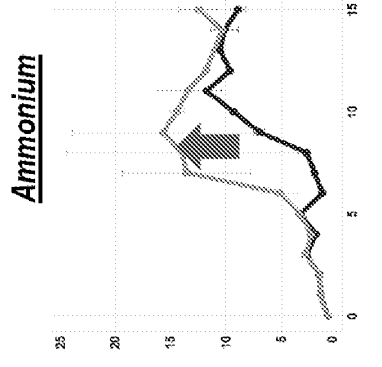


FIG. 12F



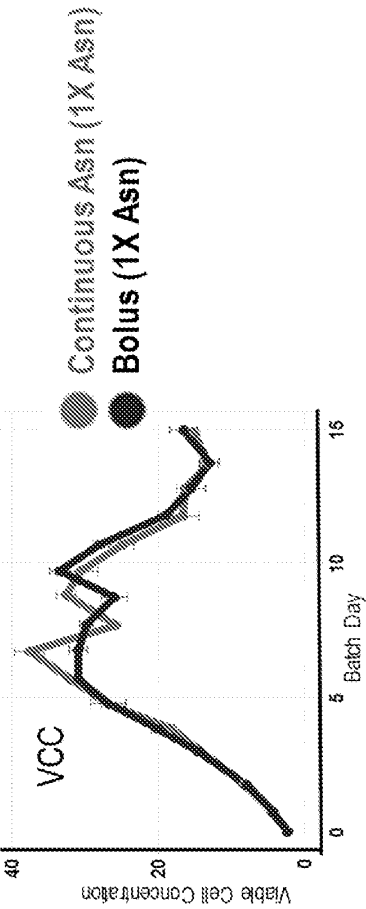


FIG. 13A

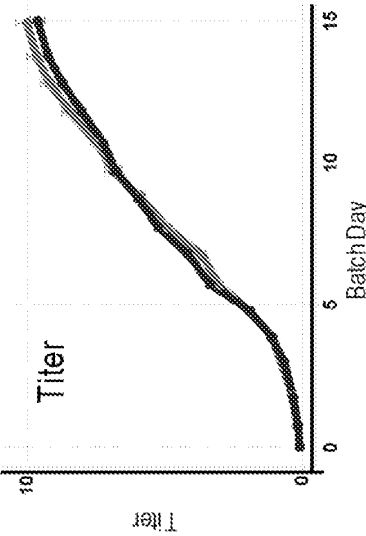


FIG. 13B

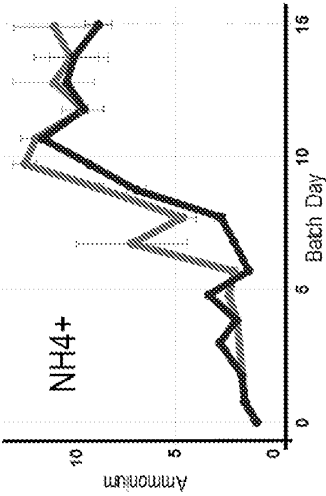


FIG. 13C

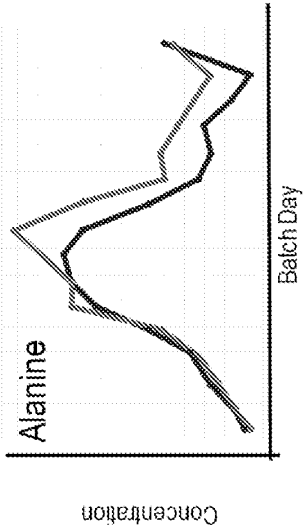


FIG. 13D

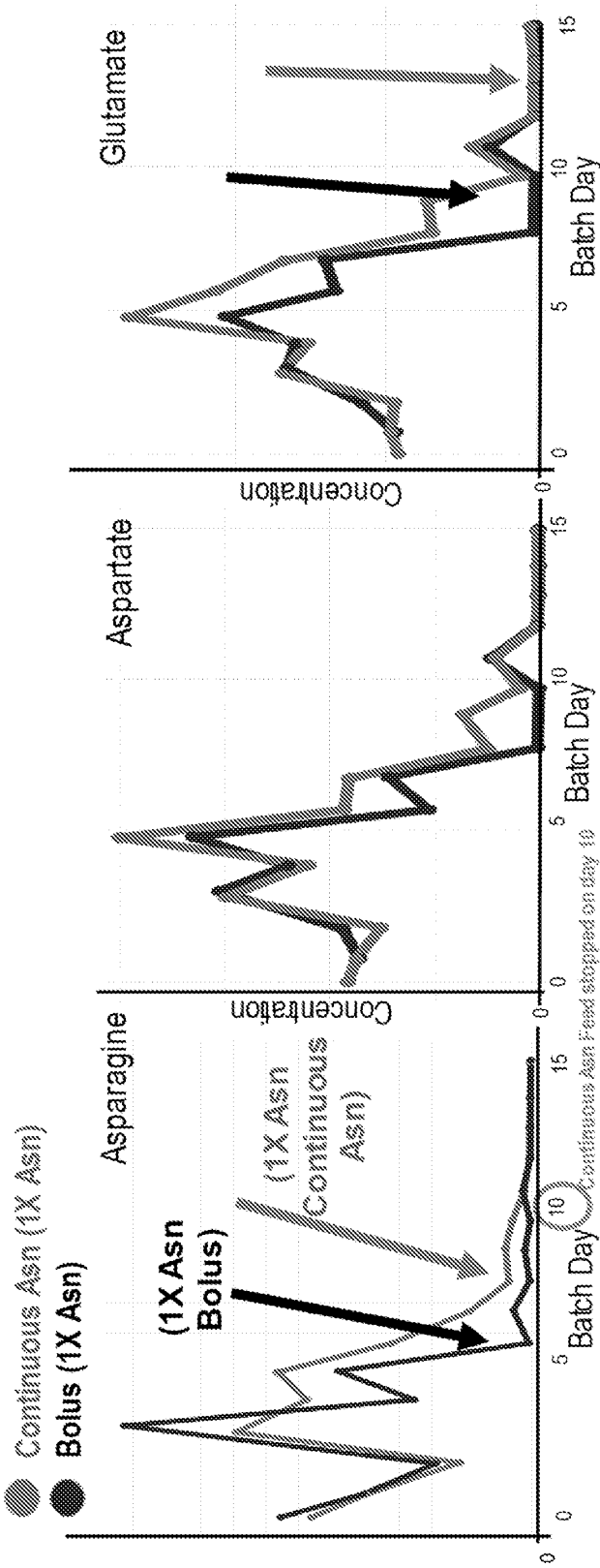


FIG. 13G

FIG. 13F

FIG. 13E

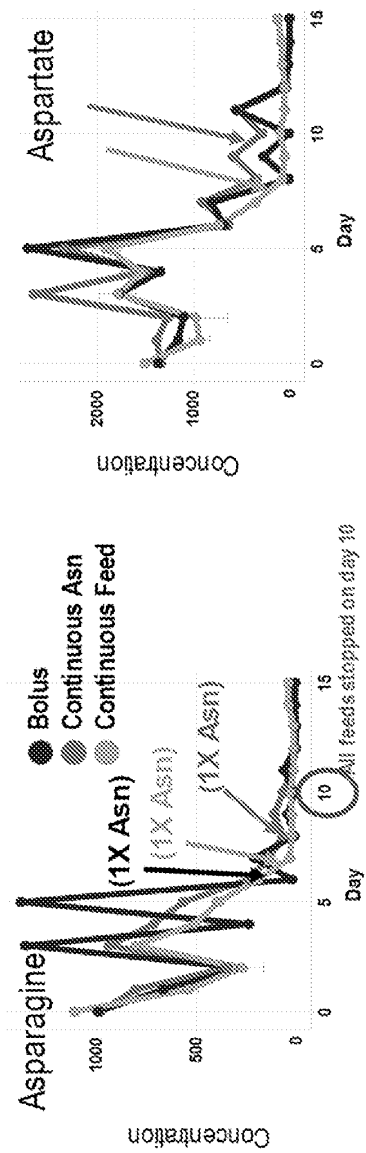


FIG. 14B

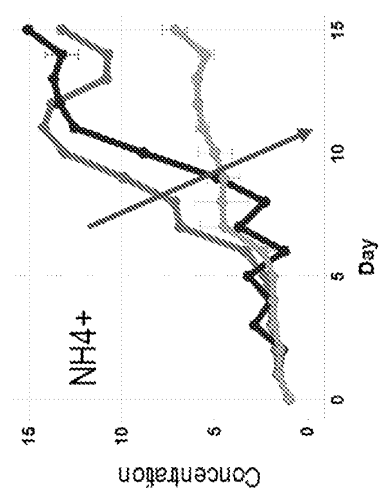


FIG. 14D

FIG. 14A

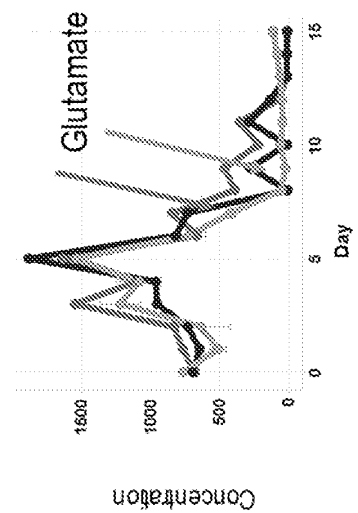


FIG. 14C

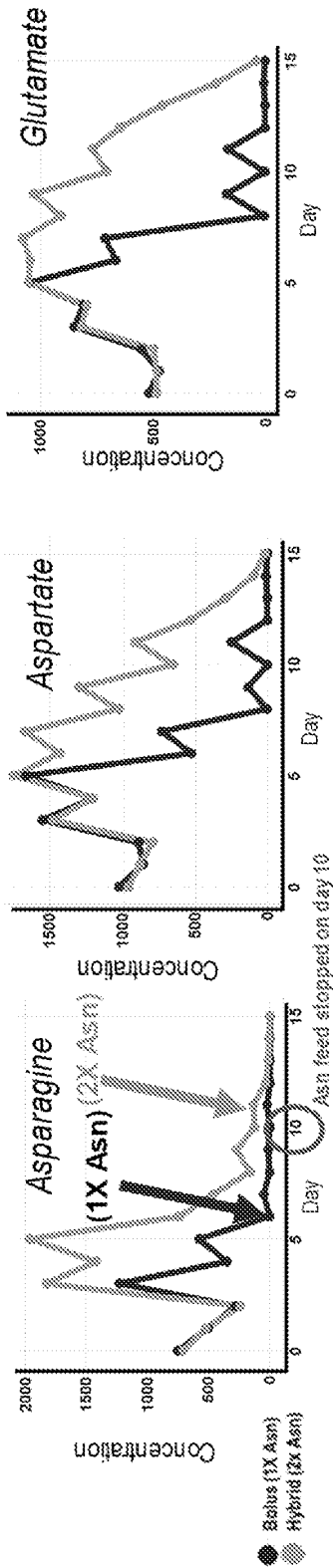


FIG. 15A

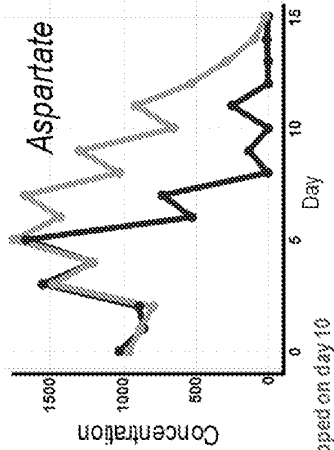


FIG. 15B

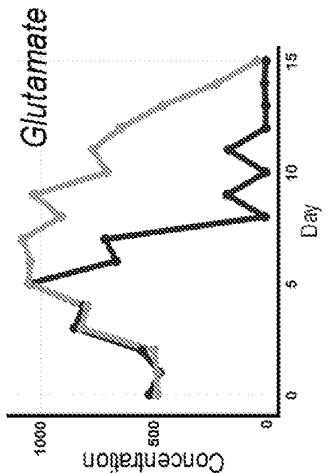


FIG. 15C

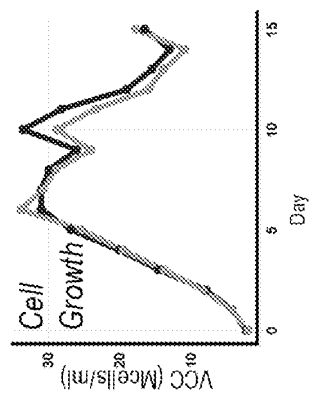


FIG. 15D

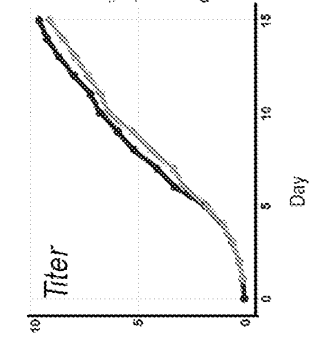


FIG. 15E

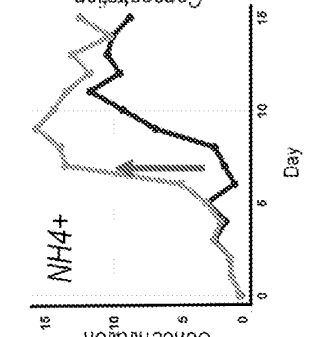


FIG. 15F

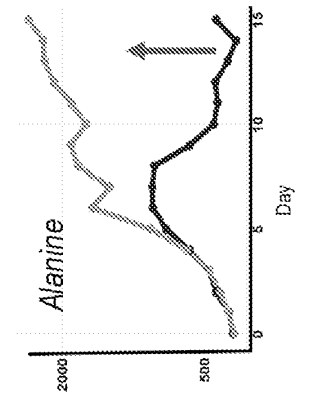


FIG. 15G

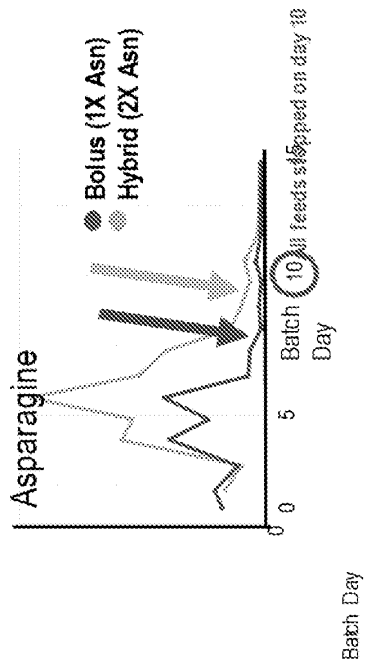


FIG. 16A

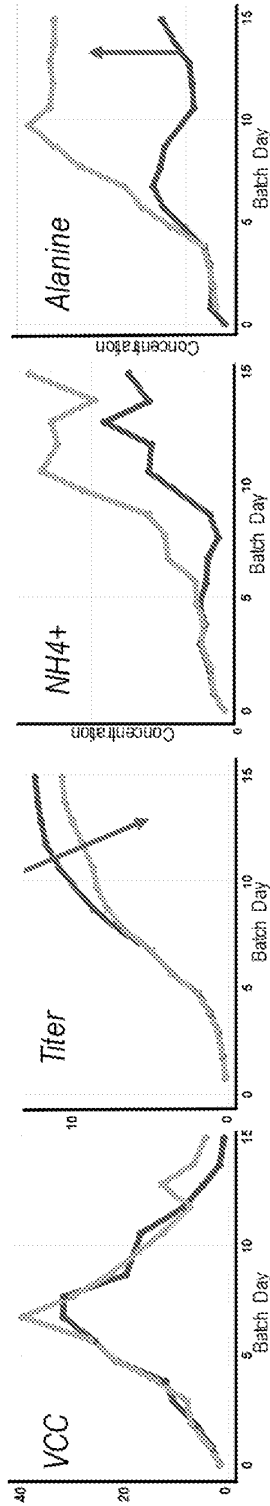
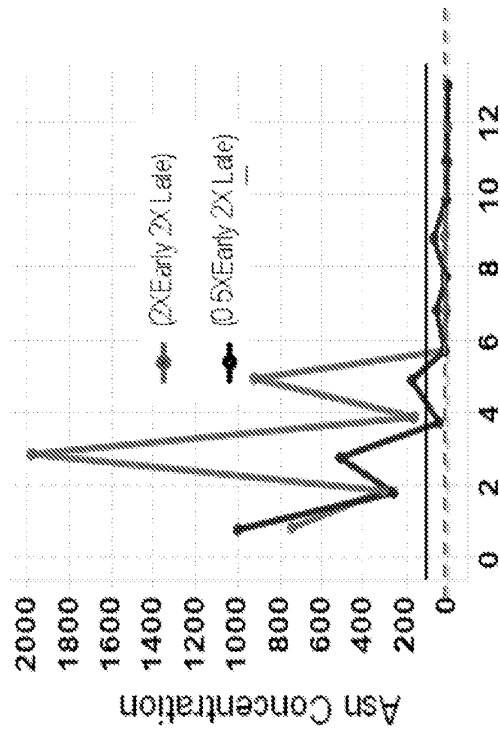


FIG. 16B

FIG. 16C

FIG. 16D

FIG. 16E



Overcome depletions through feed 2

FIG. 17A

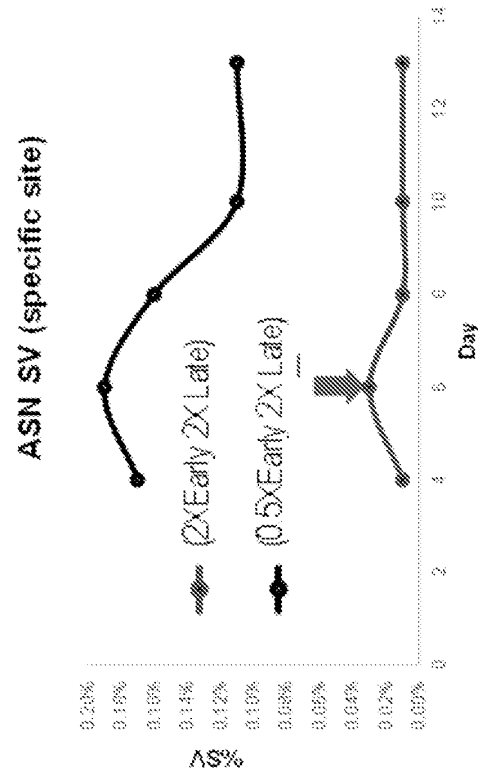


FIG. 17B

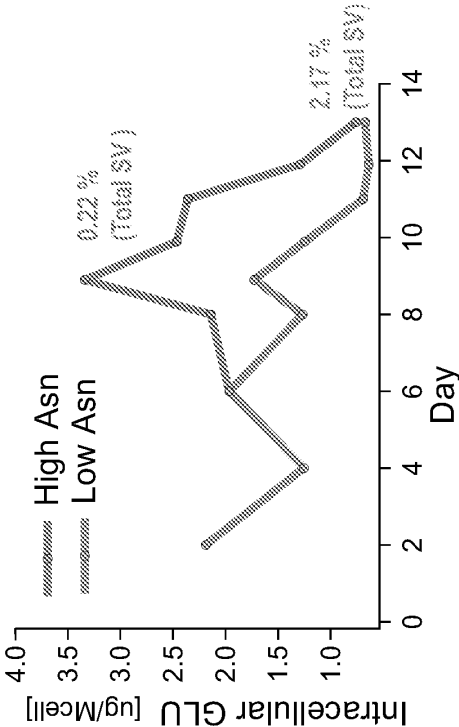
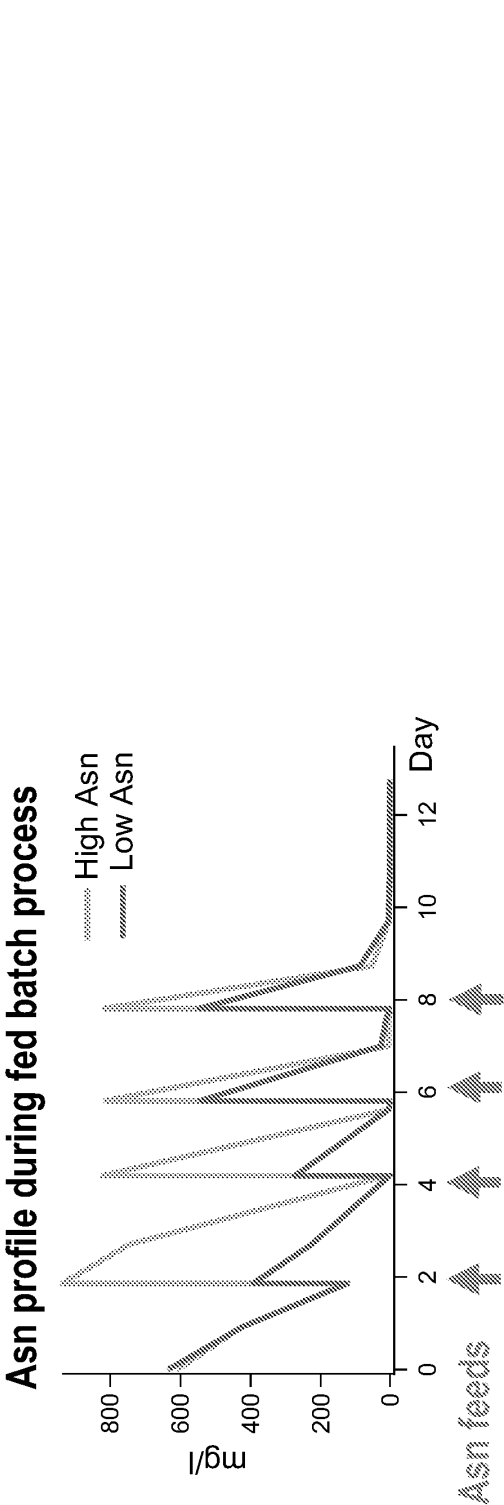


FIG. 18B

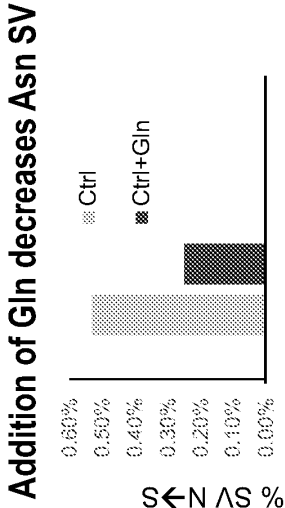


FIG. 18C

Addition of Gln decreases Asn SV

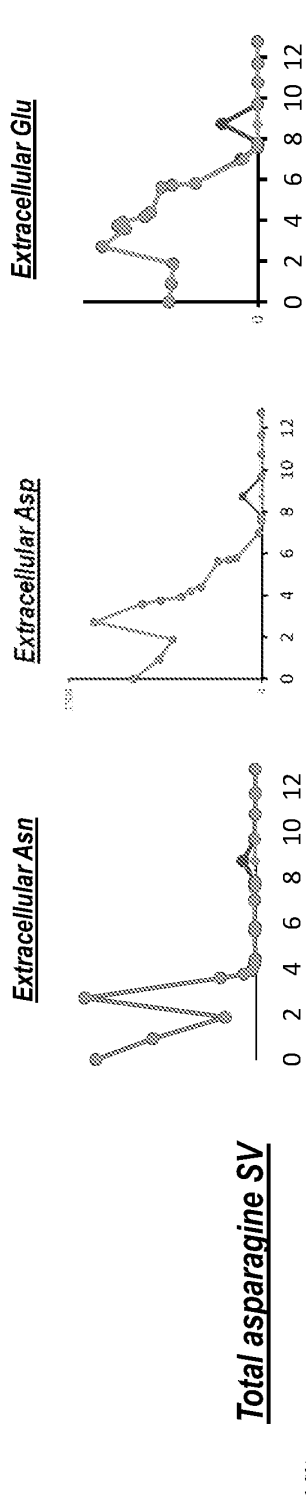


FIG. 19A

FIG. 19B

FIG. 19C

FIG. 19D

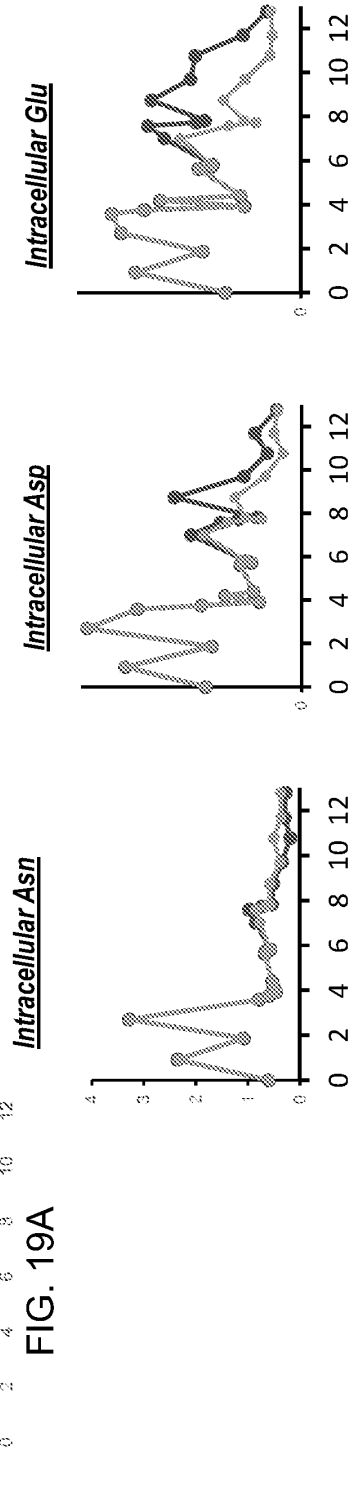


FIG. 19E

FIG. 19F

FIG. 19G

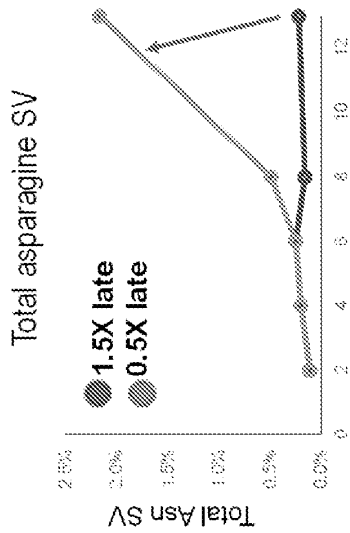


FIG. 20A

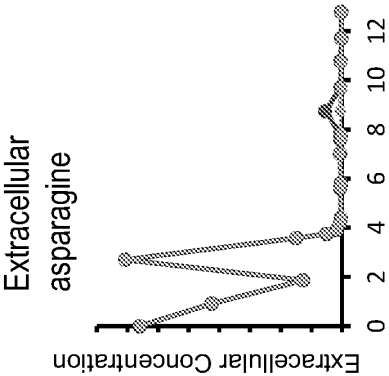


FIG. 20B

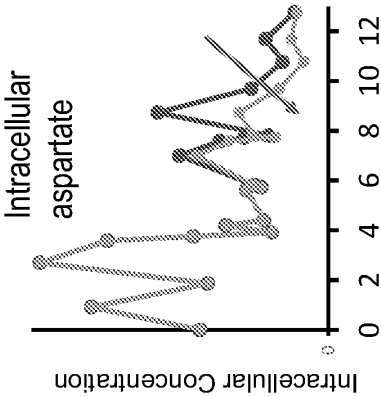


FIG. 20C

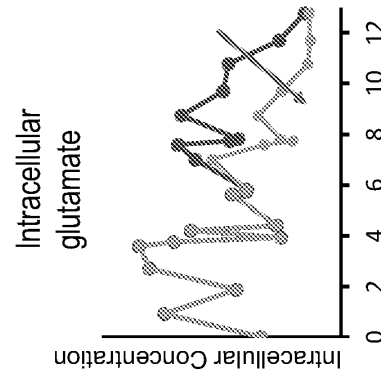


FIG. 20D

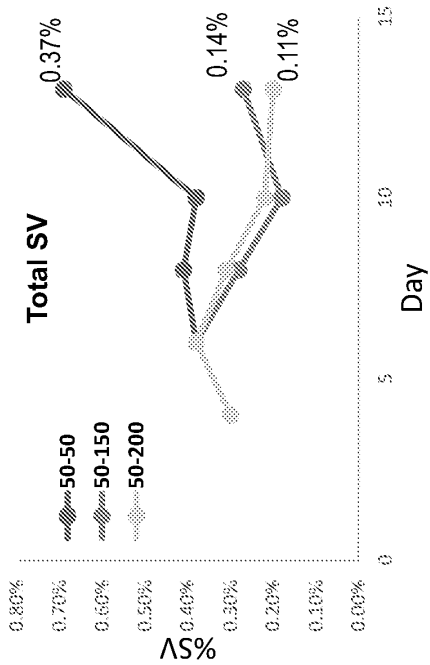


FIG. 21B

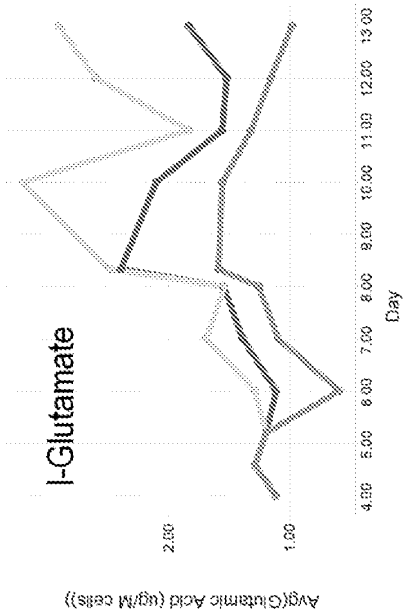


FIG. 21D

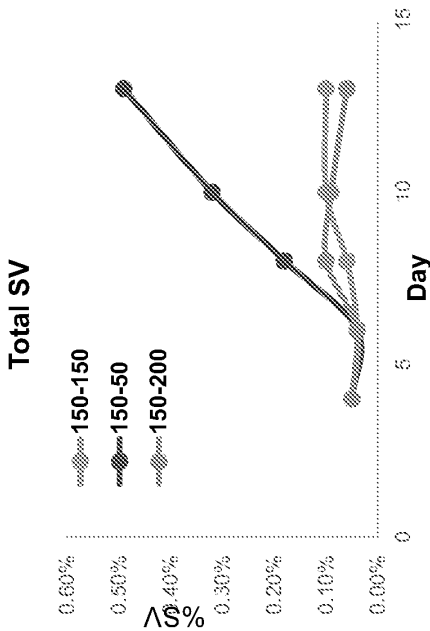


FIG. 21A

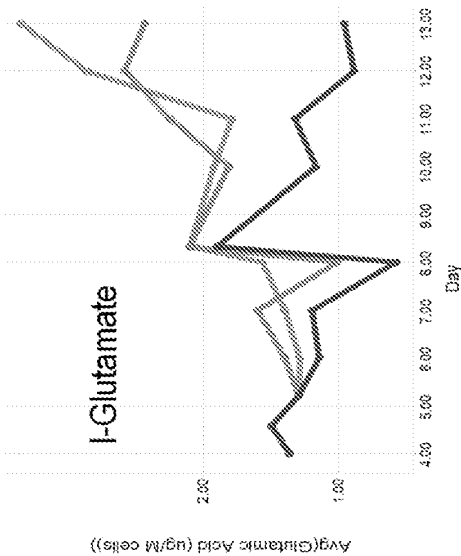


FIG. 21C

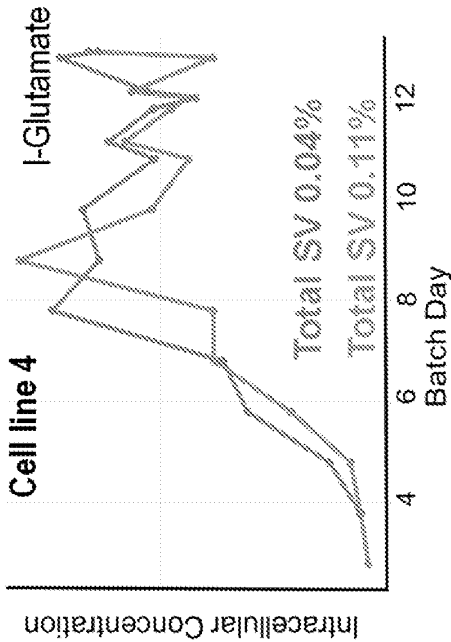


FIG. 21E

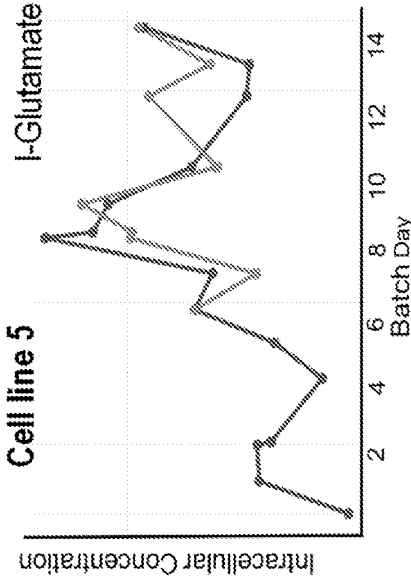


FIG. 21F

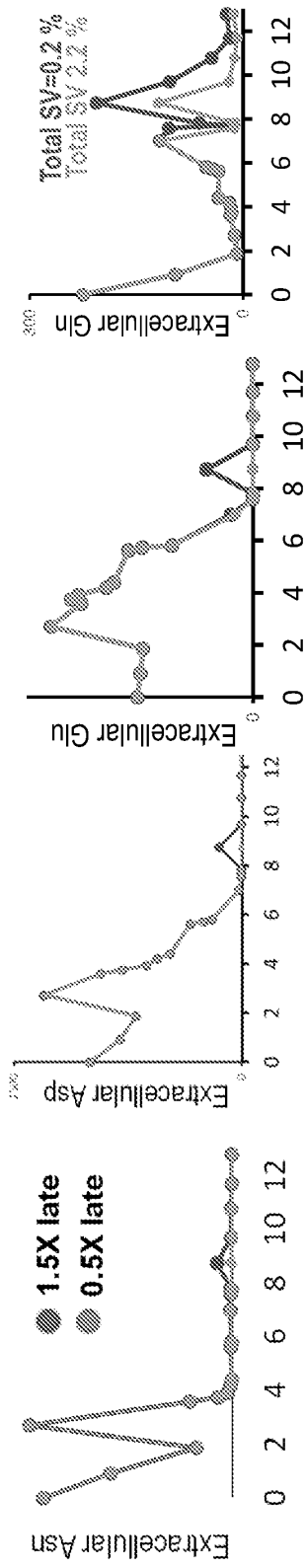


FIG. 22A

FIG. 22B

FIG. 22C

FIG. 22D

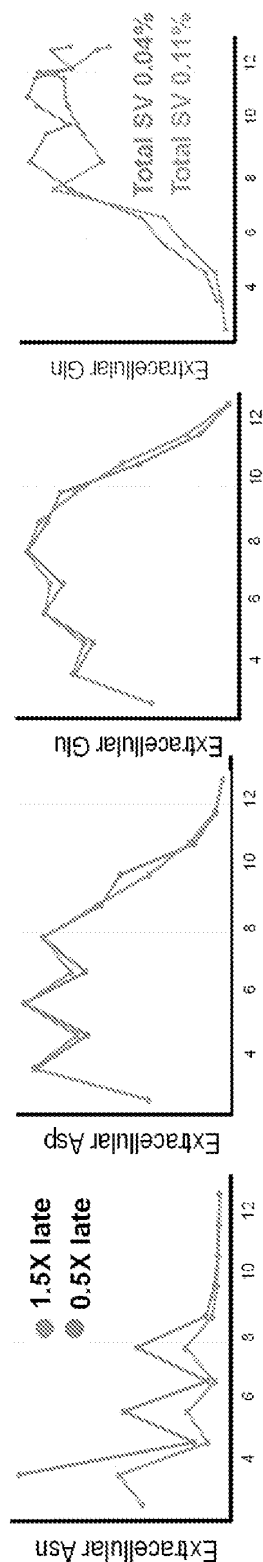


FIG. 22E

FIG. 22F

FIG. 22G

FIG. 22H

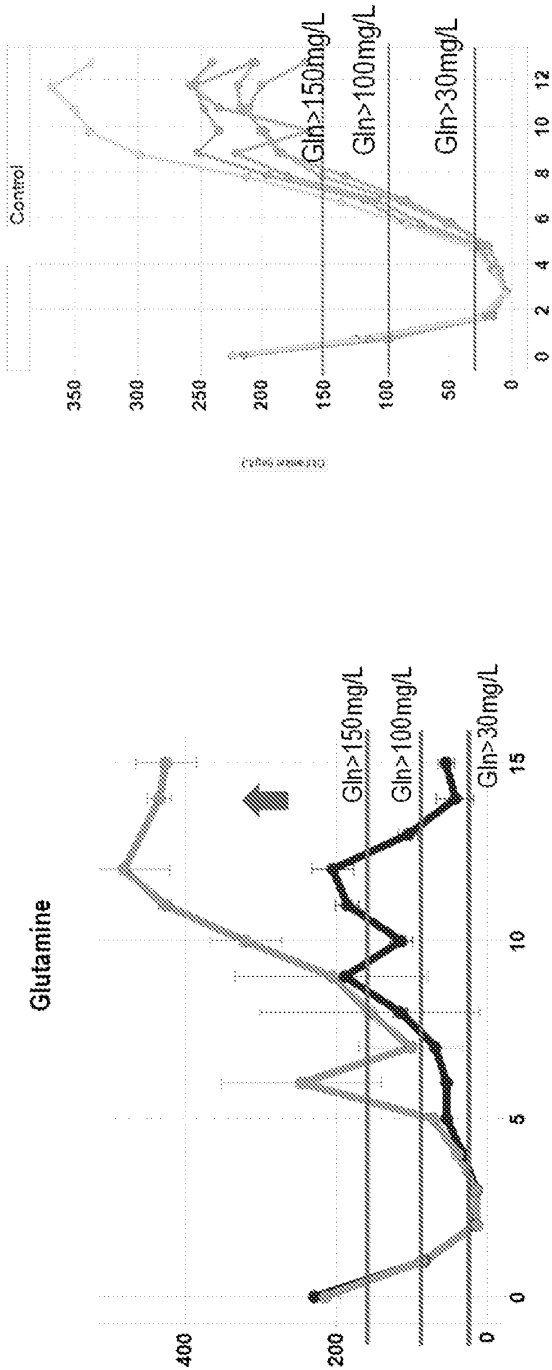


FIG. 23A

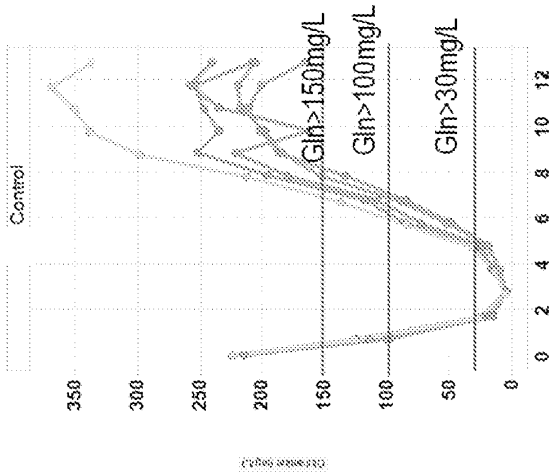


FIG. 23B

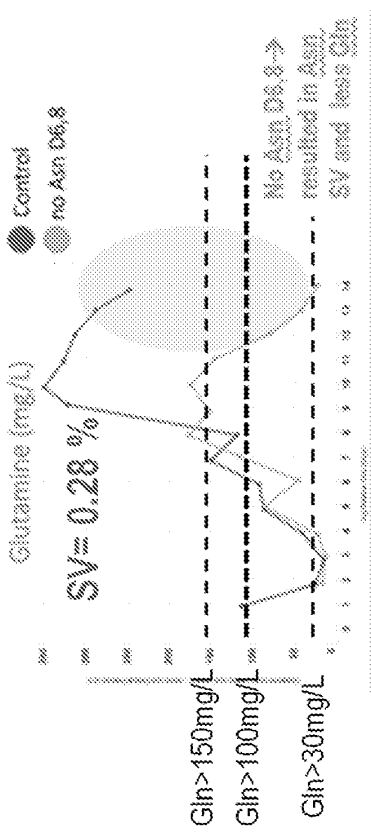


FIG. 23C