WHAT IS CLAIMED IS:

1. A method for manufacturing a protein comprising the step of producing the protein in CHO (Chinese hamster ovary) cells via perfusion of a feed medium comprising a total amino acid concentration of 20 to 65 mM, wherein a protein titer of at least 300 ug/mL is achieved in the step of producing the protein, and wherein the protein is a TNFR (tumor necrosis factor receptor)-Fc fusion protein or an anti-TNF antibody.

2. The method of claim 1 wherein the feed medium comprises a total amino acid concentration in a range selected from the group consisting of: 20 to 25 mM; 25 to 30 mM; 30 to 35 mM; 35 to 40 mM; 40 to 45 mM; 45 to 50 mM; 50 to 55 mM; 55 to 60 mM; and 60 to 65 mM.

3. The method of claim 1 wherein the protein is selected from the group consisting of etanercept, adalimumab, infliximab, and a biosimilar thereof.

4. The method of claim 1 wherein the feed medium comprises one or more of the following: a base medium, cottonseed hydrolysate, dexamethasone, ManNAc (N-acetylmannosamine), and/or D-(+)-Galactose.

5. The method of claim 1 further comprising prior to the protein production step, preparing a mixture comprising CHO cells capable of expressing a desired therapeutic protein, and a culture medium suitable for conducting such expression; and wherein the protein production step comprises (a) in a suitable vessel containing the mixture, causing the cells to produce the protein, and (b) periodically or continuously removing spent culture medium from, and adding fresh culture medium to, the vessel.

6. The method of claim 5 wherein, prior to the protein production step, the cells capable of expressing the protein are grown in a growth phase at a temperature selected from (i) 28° to 37°C; and (ii) 35° to 36°C.

7. The method of claim 6 wherein the protein production step is carried out at a temperature selected from (i) greater than 32°C; (ii) greater than 34°C; (iii) greater than 35°C; (iv) the range of 33°C to 36°C; (v) the range of 35°C to 36°C; (vi) 32.5°C; (vii) 33.5°C; (viii) 34.5°C; and (ix) 35.5°C.

8. The method of claim 7 wherein the protein being produced is selected from the group consisting of etanercept, adalimumab, infliximab, and a biosimilar thereof.

9. A perfusion method for producing a therapeutic protein comprising the steps of (a) preparing a mixture comprising CHO cells capable of expressing the protein, and a culture medium suitable for conducting such expression; (b) in a suitable vessel containing the mixture, causing the cells

to produce the protein; and (c) periodically or continuously removing spent culture medium from, and adding fresh culture medium to, the vessel, wherein the culture medium comprises (i) a total amino acid concentration of 20 to 65 mM; and (ii) at least one selected from the group consisting of: a feed, dexamethasone, ManNAc (N-acetylmannosamine), cottonseed hydrolysate and D-(+)-galactose; wherein a protein titer of at least 300 ug/mL is achieved in the step of producing the protein, and wherein the therapeutic protein is a TNFR (tumor necrosis factor receptor)-Fc fusion protein or an anti-TNF antibody.

10. The method of claim 9 wherein the therapeutic protein is selected from the group consisting of etanercept, adalimumab, infliximab, and a biosimilar thereof.

11. The method of claim 10 wherein the therapeutic protein is etanercept, or a biosimilar thereof.

12. The perfusion method of claim 11 wherein, prior to step (a), the cells capable of expressing etanercept or a biosimilar thereof are grown in a growth phase at a temperature selected from; (i) 28°C to 37°C; and (ii) 35° to 36°C.

13. The perfusion method of claim 12 wherein, during production of the etanercept or biosimilar thereof occurring in steps (b) and (c) the vessel is maintained at a temperature selected from (i) greater than 32°C; (ii) greater than 34°C; (iii) greater than 35°C; (iv) the range of 33°C to 36°C; (v) the range of 35°C to 36°C; (vi) 32.5°C; (vii) 33.5°C; (viii) 34.5°C; and (ix) 35.5°C.

14. A feed media composition formulated to provide desired total amino acid concentration in a perfusion process when used in manufacturing a therapeutic protein in a CHO cell, said desired concentration, based on the volume of a perfusion reactor used in such process, being in a range selected from: 20 to 25 mM; 25 to 30 mM; 30 to 35 mM; 35 to 40 mM; 40 to 45 mM; 45 to 50 mM; 50 to 55 mM; 55 to 60 mM; 60 to 65 mM, and wherein the composition further comprises at least one of, cottonseed hydrolysate, dexamethasone, ManNAc, and/or D-(+)-Galactose, wherein a protein titer of at least 300 ug/mL is achieved in the step of producing the protein, and wherein the therapeutic protein is a TNFR (tumor necrosis factor receptor)-Fc fusion protein or an anti-TNF antibody.