CLAIMS

[Claim 1] A peritoneal dialysis concentrate comprising an all-in-one concentrate, wherein by a diluting solution, the all-in-one concentrate can be diluted or dissolved, to obtain the peritoneal dialysis solution suitable for peritoneal dialysis treatment and, wherein the pH of the all-in-one concentrate is adjusted to be in a range of 4.0-8.0 by adding a pH adjusting agent before being diluted, and the pH of the all-in-one concentrate is in a range of 4.0-8.0 after being diluted, wherein the all-in-one concentrate contains at least one electrolyte salt, at least one buffering agent and at least one osmosis agent, and wherein the diluting solution is water for injection or water for injection directly generated from pure water or reverse osmosis water.

[Claim 2] The peritoneal dialysis concentrate according to claim 1, wherein the pH adjusting agent is hydrochloric acid.

[Claim 3] The peritoneal dialysis concentrate according to claim 1, wherein: the electrolyte salt includes one selected from a group consisting of salt of sodium, salt of calcium, salt of magnesium and any mixtures thereof; and/or the buffering agent is an alkaline buffering agent including one selected from a group consisting of sodium lactate, sodium bicarbonate and any mixtures thereof; and/or the osmosis agent includes one selected from a group consisting of dextrose, Icodextrin, glucose polymers, amino acids, small molecule crystal glycerin, sorbitol, fructose, macromolecule gel, cationic polymer, polypeptide and any mixtures thereof.

[Claim 4] The peritoneal dialysis concentrate according to any one of claims 1 to 3, wherein: the peritoneal dialysis concentrate can be diluted 2-20 times to obtain the peritoneal dialysis solution.

[Claim 5] The peritoneal dialysis concentrate according to claim 4, wherein the peritoneal dialysis concentrate can be diluted 8-12 times.

[Claim 6] The peritoneal dialysis concentrate according to any one of claims 1 to 5, wherein the peritoneal dialysis solution can be used for a continuous ambulatory peritoneal dialysis or an automated peritoneal dialysis treatment; and/or the diluting solution is water for injection or water for injection directly generated from pure water

or reverse osmosis water.

[Claim 7] A single-chamber peritoneal dialysis bag comprising:
a single chamber for containing a peritoneal dialysis concentrate according to any one of claims 1-6;
a diluting solution tubing fluidly connected with the chamber for receiving a diluting solution from a diluting solution source; and

a connecting tubing fluidly connected with the chamber, wherein the diluting solution can be filled into the chamber via the diluting solution tubing to dilute or dissolve the peritoneal dialysis concentrate and obtain a peritoneal dialysis solution suitable for a peritoneal dialysis treatment via the connecting tubing.

[Claim 8] A dual-chamber peritoneal dialysis bag comprising:

a first chamber for containing a peritoneal dialysis concentrate according to any one of claims 1-6;

a second chamber separated from the first chamber by a peelable welding line;

a diluting solution tubing fluidly connected with the second chamber which is empty for receiving a diluting solution from a diluting solution source; and

a connecting tubing fluidly connected with the second chamber, wherein the diluting solution can be filled into the second chamber via the diluting solution tubing to break the peelable welding line such that the peritoneal dialysis concentrate is diluted or dissolved to obtain a peritoneal dialysis solution suitable for a peritoneal dialysis treatment via the connecting tubing.

[Claim 9] A set for a continuous ambulatory peritoneal dialysis, wherein the set comprises the single-chamber peritoneal dialysis bag according to claim 7 or the dual-chamber peritoneal dialysis bag according to claim 8, which contains the peritoneal dialysis concentrate according to any one of claims 1-6.

[Claim 10] A set for an automated peritoneal dialysis, wherein the set comprises the single-chamber peritoneal dialysis bag according to claim 7 or the dual-chamber peritoneal dialysis bag according to claim 8, which contains the peritoneal dialysis concentrate according to any one of claims 1-6.