What is claimed is:

1. A preparation formulation suitable for coating a transdermal patch wherein said preparation formulation comprises a therapeutically active substance, water and one or more excipients selected from the group consisting of Zn^{2+} salts, Mg^{2+}salts, Ca^{2+}salts, polyethylene glycols and hydroxypropyl beta-cyclodextrins.
2. The preparation formulation of claim 1 further comprising a bioactive peptide or protein.
3. The preparation formulation of claims 1-2 comprising an antibody.
4. A transdermal patch comprising a plurality of microprojections wherein at least one microprojection in the array is covered at least in part by a coating, said coating comprising a therapeutically active substance and one or more excipients selected from the group consisting of Zn^{2+} salts, Mg^{2+} salts, Ca^{2+} salts, polyethylene glycols and hydroxypropyl beta-cyclodextrins.
5. The transdermal patch of claim 4, wherein the microprojections are microneedles.
6. The transdermal patch of any one of claims 4-5 wherein said therapeutically active substance comprises a bioactive peptide or protein.
7. The transdermal patch according to any of claims 4-6 wherein said therapeutically active substance comprises an antibody.
8. The preparation formulation according to any of claims 1-3 or the transdermal patch according to any of claims 4-7 comprising a bioactive peptide.
9. The preparation formulation or the transdermal patch according to claim 8 wherein said bioactive peptide contains at least 10 amino acids, optionally wherein said bioactive peptide is abaloparatide as set forth in SEQ ID NO 1.
10. The preparation formulation or the transdermal patch according to any one of the preceding claims wherein:

    (i) said excipients are selected from the group consisting of $ZnCl_2$, $Zn(OAc)_2$, $Zn_3(PO_4)_2$, ZnCitrate, ZnOxalate, MgO, MgCitrate, $MgSO_4$, MgOrotate, MgLactate, $MgCO_3$ CaSorbate, CaCitrate, CaAscorbate, $Ca_3(PO_4)_2$, $CaCl_2$, $CaCO_3$, $CaSO_4$, and $Ca(OAc)_2$, optionally wherein said excipient is selected from $ZnCl_2$ and $Zn(OAc)_2$ and combinations thereof;

    (ii) the molar ratio of said excipient or excipients to said therapeutically active substance is 0.1 to 2.0;

    (iii) the molar ratio of said excipient or excipients to said therapeutically

active substance is 0.2 to 1.5; and/or

(iv) the molar ratio of said excipient or excipients to said therapeutically active substance is 0.25 to 1.0.

11. The transdermal patch according to any one of claims 8-10 wherein said bioactive peptide is abaloparatide as set forth in SEQ ID NO 1 and said abaloparatide is present on said microprojection array in an amount between 90-110 µg, 140-160 µg, 185-220 µg, 225-275 µg or about100 µg, about 150 µg, about 200 µg or about 250 µg.

12. A transdermal patch according to any one of claims 9-11 for use in treating a condition selected from the group consisting of osteoporosis, osteopenia, osteoarthritis, and bone fracture in a subject, wherein said bioactive peptide is abaloparatide as set forth in SEQ ID NO 1.

13. A transdermal patch according to any one of claims 9-11 for use in preventing vertebral, non-vertebral, clinical and major osteoporotic fractures, wherein said bioactive peptide is abaloparatide as set forth in SEQ ID NO 1.

14. A transdermal patch according to any one of claims 9-11 for use in improving bone mineral density (BMD), improving trabecular bone score (TBS), and/or reducing bone fractures in a subject comprising administering to the subject, wherein said bioactive peptide is abaloparatide as set forth in SEQ ID NO 1.

15. The transdermal patch for use according to any one of claims 12-14 wherein:
(i) said patch comprises between 300-750 microprojections;
(ii) said administration comprises application of a force to the transdermal patch sufficient to drive one or more of the microprojections through the stratum comeum of the patient; and/or
(iii) the site of administration is the abdomen or the thigh.