WHAT IS CLAIMED IS:

1. A topical formulation for treating a skin disease comprising a JAK 1/2 inhibitor, which is ruxolitinib, or a pharmaceutically acceptable salt thereof, and an organic amine pH adjusting agent.

2. The formulation of claim 1 or 2, wherein the organic amine pH adjusting agent is a tertiary amine or an alkanol amine.

3. The formulation of claim 1 or 2, wherein the JAK 1/2 inhibitor, or a pharmaceutically acceptable salt thereof, is ruxolitinib phosphate.

4. The formulation of claim 1, wherein the formulation comprises from about 0.05% to about 3.0% or about 0.05% to about 1.5% w/w of the ruxolitinib, or a pharmaceutically acceptable salt thereof, on a free base basis.

5. The formulation of claim 4, wherein the formulation comprises about 0.05%, about 0.06%, about 0.07%, about 0.08%, about 0.09%, about 0.1%, about 0.15%, about 0.2%, about 0.25%, about 0.3%, about 0.35%, about 0.4%, about 0.45%, about 0.5%, about 0.55%, about 0.6%, about 0.65%, about 0.7%, about 0.75%, about 0.8%, about 0.85%, about 0.9%, about 0.95%, about 1.0%, about 1.05%, about 1.1%, about 1.15%, about 1.2%, about 1.25%, about 1.3%, about 1.35%, about 1.4%, about 1.45%, about 1.5%, about 1.55%, about 1.6%, about 1.65%, about 1.7%, about 1.75%, about 1.8%, about 1.85%, about 1.9%, about 1.95%, about 2.0%, about 2.5%, or about 3.0% by weight of the formulation on a free base basis of the ruxolitinib, or the pharmaceutically acceptable salt thereof.

6. The formulation of any one of claims 1-5, wherein the formulation is in a form chosen from a cream, a lotion, a foam or foamable formulation, a pump spray, an aqueous gel, a non-aqueous gel, and an emulsified gel.

7. The formulation of any one of claims 1-6, wherein the formulation is an aqueous formulation.

8. The formulation of any one of claims 1-7, further comprising one or more of water, an oil component, an emulsifier or stabilizer component, and a solvent component.

9. The formulation of claim 7, wherein the water is present in an amount from about 5% to about 90%, from about 10% to about 90%, from about 10% to about 80%, from about 10% to about 70%, from about 10% to about 60%, from about 10% to about 50%, from about 20% to about 70%, from about 20% to about 60%, from about 30% to about 60%, or from about 20% to about 50% by weight of the formulation.

10. The formulation of claim 8 or 9, wherein the oil component is present in an amount from about 5% to about 90%, from about 5% to about 80%, from about 5% to about 70%, from about 5% to about 60%, from about 5% to about 50%, or from about 5% to about 40% by weight of the formulation.

11. The formulation of claim 10, wherein the oil component comprises an emulsifier or stabilizer component, or an emulsifier or wetting agent component.

12. The formulation of claim 11, wherein the emulsifier or stabilizer component, or the emulsifier or wetting agent component, is present in an amount from about 1% to about 40%, from about 1% to about 30%, from about 1% to about 20%, from about 5% to about 40%, or from about 5% to about 25% by weight of the formulation.

13. The formulation of any one of claims 8-12, wherein the solvent component comprises from about 1% to about 70%, from about 1% to about 60%, from about 1% to about 50%, from about 1% to about 40%, from about 1% to about 30%, from about 1% to about 20%, from about 10% to about 70%, from about 10% to about 60%, from about 10% to about 50%, about 10% to about 40%, about 10% to about 40%, about 10% to about 30%, from about 1% to about 20%, from about 5% to about 20%, from about 2% to about 30%, from about 5% to about 30%, from about 5% to about 25%, from about 5% to about 20%, or from about 10% to about 20% by weight of the formulation.

14. The formulation of any one of claims 1-8, further comprising one or more of a stabilizing agent and an antioxidant.

15. The formulation of any one of claims 1-14, wherein the formulation has a pH from about 4.0 to about 8.0, from about 4.0 to about 7.0, from about 4.0 to about 6.0, about 5.0 to about 8.0, from about 5.5 to about 7.5, from about 5.5 to about 7.0, from about 5.5 to about 6.5, from about 5.0 to about 6.0, and at about 5.5.

16. The formulation of any one of claims 1-15, wherein the amine pH adjusting agent is independently selected from trolamine, tris, ethanolamine, diethanolamine, ammonia, diisopropanolamine, 1-amino-2-propanol, 2-amino-2-ethyl-1,3-propanediol, 2-amino-2-methyl-1-propanol, diisopropylamine, imidazole, and pyridine.

17. The formulation of claim 16, wherein the amine pH adjusting agent is trolamine.

18. The formulation of any one of claims 1-17, further comprising one or more pH adjusting agents, chelating agents, preservatives, co-solvents, penetration enhancers, humectants, thickening agents, gelling agents, viscosity building agents, surfactants, propellants, fragrances, colorants, and any combination thereof.

19. The formulation of any one of claims 1-18, wherein the organic amine pH adjusting agent is trolamine and further comprising Transcutol P and glycerol.

20. The formulation of any one of claims 1-18, wherein the organic amine pH adjusting agent is trolamine and further comprising ethanol and water.

21. The formulation of any one of claims 1-20, wherein the formulation is a cream.

22. The formulation of claim 21, wherein the cream is an oil-in-water emulsion.

23. The formulation of claim 21 or 22, wherein the cream comprises water and an oil component.

24. The formulation of any one of claims 21-23, wherein the cream comprises water, a solvent component, and an oil component.

25. The formulation of claim 24, wherein the oil component comprises an emulsifying or wetting agent component.

26. The formulation of any one of claims 21-25, wherein the oil component comprises one or more stabilizing agents.

27. The formulation of any one of claims 1-20, wherein the formulation is a lotion formulation.

28. The formulation of claim 27, wherein the lotion formulation is an oil-in-water emulsion.

29. The formulation of claim 27 or 28, wherein the lotion formulation comprises water and an oil component.

30. The formulation of any one of claims 27-29, wherein the lotion formulation comprises water, a solvent component, and an oil component.

31. The formulation of claim 30, wherein the oil component comprises an emulsifying or wetting agent component.

32. The formulation of any one of claims 27-31, wherein the oil component comprises one or more stabilizing agents.

33. The formulation of any one of claims 1-20, wherein the formulation is a foam or foamable formulation.

34. The formulation of claim 33, wherein the foam comprises a base component and a propellant component.

35. The formulation of claim 34, wherein the base component is an oil-in-water emulsion.

36. The formulation of claim 34 or 35, wherein the propellant component comprises one or more hydrofluorocarbons (HFCs) or hydrofluoroolefins (HFOs).

37. The formulation of any one of claims 1-20, wherein the formulation is a spray formulation.

38. The formulation of claim 37, wherein the spray formulation comprises an aqueous spray formulation.

39. The formulation of claim 37 or 38, wherein the spray formulation comprises water, a solvent component, and a volatile excipient.

40. The formulation of claim 37 or 38, the spray formulation comprises water, a solvent component, a volatile excipient, and a film-forming component.

41. The formulation of any one of claims 1-20, wherein the formulation is an aqueous gel formulation.

42. The formulation of claim 41, wherein the aqueous gel formulation comprises water, a solvent component, a stabilizing component, and a gelling agent component.

43. The formulation of claim 41, wherein the aqueous gel formulation comprises water, a solvent component, stabilizing component, a gelling agent component, and a preservative.

44. The formulation of claim 41, wherein the aqueous gel formulation comprises water, a solvent component, component stabilizing component, a gelling agent component, a preservative, and a chelating agent.

45. The formulation of any one of claims 1-20, wherein the formulation is a non-aqueous gel formulation.

46. The formulation of claim 45, wherein the non-aqueous gel formulation comprises a solvent component.

47. The formulation of claim 45, wherein the non-aqueous gel formulation comprises a solvent component and a volatile excipient.

48. The formulation of claim 45, wherein the non-aqueous gel formulation comprises a solvent component, a volatile excipient, and a preservative.

49. The formulation of claim 45, wherein the non-aqueous gel formulation comprises a solvent component, a volatile excipient, a preservative, and a gelling component.

50. The formulation of any one of claims 1-20, wherein the formulation is an emulsified gel formulation.

51. The formulation of claim 50, wherein the emulsified gel formulation comprises water, a solvent component, and an oil component.

52. The formulation of claim 51, wherein the oil component comprises an emulsifier component.

53. The formulation of claim 50, wherein the emulsified gel formulation comprises water, a solvent component, an oil component, an emulsifier component, and a chelating agent.

54. The formulation of claim 50, wherein the emulsified gel formulation comprises water, a solvent component, an oil component, an emulsifier component, a chelating agent, and a preservative component

55. Use of a JAK 1/2 inhibitor, which is ruxolitinib, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for the treatment of a skin disease in a patient in need thereof, wherein the medicament is a topical formulation and is to be topically administered to an affected area of the patient with an organic amine pH adjusting agent.

56. The use of claim 55, wherein the JAK 1/2 inhibitor, or a pharmaceutically acceptable salt thereof, is ruxolitinib phosphate.

57. The use of claim 55 or 56, wherein the skin disease is an autoimmune or an inflammatory skin disease.

58. The use of any one of claim 55-57, wherein the skin disease is a Th1 or Th17 associated skin disease.

59. The use of any one of claims 55-57, wherein the skin disease is mediated by interleukin 22 (IL-22), C-X-C motif chemokine 10 (CXCL10), matrix metallopeptidase 12 (MMP12), or a combination thereof.

60. The use of claim 55, wherein the skin disease is mediated by Defb4, S100a12, or Serpinb4.

61. The use of any one of claims 55-57, wherein the skin disease is mediated by filaggrin/FLG, Loricin/LOR, IL-31, TSLP, CAMP, CCL17, CCL22, DefB4a, interferon-gamma, IL-17A, IL-17F, IL-22, IL-33, IL-4, or TNFSF18.

62. The use of any one of claims 55-57, wherein the skin disease is selected from psoriasis, atopic dermatitis, alopecia, vitiligo, Reiter's syndrome, pityriasis rubra pilaris, epidermolysis bullosa simplex, palmoplantar keratoderma, pachyonychia congenita, steatocystoma multiplex, cutaneous lichen planus, cutaneous T-cell lymphoma, hidradenitis suppurativa, contact dermatitis, and ichthyosis.

63. The use of any one of claims 55-57, wherein the skin disease is rosacea, psoriatic arthritis, dermal fibrosis, morphea, spitz nevi, dermatophytosis, or acne vulgaris.

64. The use of any one of claims 55-57, wherein a synergistic effect occurs between the medicament comprising the JAK1/2 inhibitor, or the pharmaceutically acceptable salt thereof, and the amine pH adjusting agent.

65. The use of any one of claims 55-64, wherein the topical formulation is to be administered at least one time per day.

66. The use of any one of claims 55-64, wherein the topical formulation is to be administered at least two times per day.

67. The use of any one of claims 55-66, wherein the medicament is a topical formulation according to any one of claims 1-2 and 4-54.