What is claimed is:

1. A method of treating a disease chosen from membranous nephropathy (MN), IgG4-related diseases (IgG4-RD), and antiphospholipid syndrome (APS) in a mammal in need thereof, comprising administering to said mammal a pharmaceutical composition comprising:

a compound chosen from (E) isomer, (Z) isomer, and a mixture of (E) and (Z) isomers of 2-[(3R)-3-[4-amino-3-(2-fluoro-4-phenoxy-phenyl)pyrazolo[3,4-d]pyrimidin-1-yl]piperidine-1-carbonyl]-4-methyl-4-[4-(oxetan-3-yl)piperazin-1-yl]pent-2-enenitrile; and/or

a pharmaceutically acceptable salt of any of the foregoing compounds; and

a pharmaceutically acceptable carrier or excipient.

2. The method of claim 1, wherein the disease is acute.

3. The method of claim 1 or 2, wherein the disease is an IgG4-RD disease flare.

4. The method of any one of claims 1-3, wherein the pharmaceutical composition is orally administered.

5. The method of any one of claims 1-4, wherein the pharmaceutical composition is administered daily.

6. The method of any one of claims 1-5, wherein the pharmaceutical composition is orally administered daily.

7. The method of any one of claims 1-6, wherein the pharmaceutical composition is administered in place of an immunosuppressive therapy.

8. The method of any one of claims 1-7, wherein the pharmaceutical composition is administered in place of a corticosteroid therapy.

9. The method of any one of claims 1-6, wherein the pharmaceutical composition is administered in combination with an immunosuppressive therapy.

10. The method of any one of claims 1-6, wherein the pharmaceutical composition is administered in combination with a corticosteroid therapy.

11. The method of any of claims 1-6 or 8-10, wherein the pharmaceutical composition is administered in combination with a noncorticosteroidal immunosuppressive and/or anti-inflammatory agent.

12. The method of any one of claims 1 or 4-6, wherein the pharmaceutical composition is administered in place of an immunosuppressive maintenance therapy.

13. The method of any one of claims 1 or 4-6, wherein the pharmaceutical composition is administered in place of a corticosteroid maintenance therapy.

14. The method of any one of claims 1, 2, or 4-6, wherein the pharmaceutical composition is administered in combination with an immunosuppressive maintenance therapy.

15. The method of any one of claims 1, 2, or 4-6, wherein the pharmaceutical composition is administered in combination with a corticosteroid maintenance therapy.

16. The method of any one of claims 13-15, wherein the pharmaceutical composition is administered in combination with a noncorticosteroidal immunosuppressive and/or anti-inflammatory agent.

17. The method of any one of claims 1-16, wherein the pharmaceutical composition comprises a compound which is a substantially pure (E) or (Z) isomer of 2-[(3R)-3-[4-amino-3-(2-fluoro-4-phenoxy-phenyl)pyrazolo[3,4-d]pyrimidin-1-yl]piperidine-1-carbonyl]-4-methyl-4-[4-(oxetan-3-yl)piperazin-1-yl]pent-2-enenitrile, and/or

a pharmaceutically acceptable salt of said compound; and

a pharmaceutically acceptable carrier or excipient.

18. The method of any one of claims 1-17, wherein at least about 85% w/w of 2-[(3R)-3-[4-amino-3-(2-fluoro-4-phenoxy-phenyl)pyrazolo[3,4-d]pyrimidin-1-yl]piperidine-1-

carbonyl]-4-methyl-4-[4-(oxetan-3-yl)piperazin-1-yl]pent-2-enenitrile or at least about 85% w/w of a pharmaceutically acceptable salt of 2-[(3R)-3-[4-amino-3-(2-fluoro-4-phenoxy-phenyl)pyrazolo[3,4-d]pyrimidin-1-yl]piperidine-1-carbonyl]-4-methyl-4-[4-(oxetan-3-yl)piperazin-1-yl]pent-2-enenitrile is the (E) isomer.

19. The method of any one of claims 1-18, wherein the mammal is a human.

20. The method of any one of claims 1-19, wherein the disease is an IgG4-related disease characterized by an IgG4-RD Responder Index (RI) greater than or equal to 2 in at least one organ system.

21. The method of any one of claims 1-20, wherein the disease is an IgG4-related disease characterized by a serum IgG4 concentration greater than 1.5 times the upper limit of normal.

22. The method of any one of claims 1-21, wherein the disease is chosen from IgG4-related sialadenitis, IgG4-related ophthalmic disease (IgG4-ROD), IgG4-related pharyngitis, IgG4-related thyroid disease, IgG4-related hypophysitis, IgG4-related pachymeningitis, IgG4-related leptomeningitis, IgG4-related pancreatitis, IgG4-related lung disease, IgG4-related pleuritis, IgG4-related hepatopathy, IgG4-related sclerosing cholangitis, IgG4-related cholecystitis, IgG4-related aortitis, IgG4-related periaortitis, IgG4-related periarteritis, IgG4-related pericarditis, IgG4-related mediastinitis, IgG4-related retroperitoneal fibrosis, IgG4-related mesenteritis, IgG4-related mastitis, IgG4-related kidney disease (IgG4-RKD), IgG4-related prostatitis, IgG4-related perivasal fibrosis, IgG4-related paratesticular pseudotumor, IgG4-related epididymo-orchitis, IgG4-related lymphadenopathy, IgG4-related skin disease, and IgG4-related perineural disease, or flares of any of the preceding IgG4-related diseases.

23. The method of claim 1, wherein the pharmaceutical composition is administered in combination with an active pharmaceutical ingredient chosen from interferon alpha, interferon gamma, cyclophosphamide, tacrolimus, mycophenolate mofetil, methotrexate, dapsone, sulfasalazine, azathioprine, an anti-CD20 agent, an anti-TNF alpha agent, an anti-IL-4 agent toward ligand or its receptors, an anti-IL-6 agent toward ligand or its receptors, an anti-IL-12 agent to ligand or its receptors, an anti-IL-17 agent to ligand or its receptors, an anti-IL-1 agent to ligand or its receptors, an anti-IL-2 agent to ligand or its

receptors, an anti-IL-23 agent to ligand or its receptors, an anti-IL-12/23 agent to ligand or receptors, an anti-CD2 agent, an anti-CD3 agent, an anti-CD80/86 agent, an anti-sphingosine-1-phosphate receptor agent, an anti-C5 agent, an anti-mTOR agent, an anti-calcineurin agent, an anti-BAFF/BlyS agent, leflunomide, and teriflunomide.

24. The method of claim 1, wherein the pharmaceutical composition is administered in combination with rituximab, dupilumab, ofatumumab, obinutuzumab, or veltuzumab, or a biosimilar version of any of the foregoing.

25. The method of any one of claims 1-6, 9-11, or 14-24, wherein the mammal is treatment naïve with respect to a immunosuppressive therapy.

26. The method of any one of claims 1-6, 9-11, or 14-24, wherein the mammal is treatment naïve with respect to any immunosuppressive therapy.

27. The method of any one of claims 1-24, wherein the mammal has been previously treated with an immunosuppressive therapy.