#### FORM 2

THE PATENTS ACT, 1970
(39 of 1970)
&
THE PATENTS RULES, 2003

### COMPLETE SPECIFICATION

(See section 10, rule 13)

1. Title of the invention: ANTI-HUMAN PD-1 ANTIBODY CRYSTALS AND METHODS OF USE THEREOF

# 2. Applicant(s)

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## 3. Preamble to the description

## COMPLETE SPECIFICATION

The following specification particularly describes the invention and the manner in which it is to be performed.

- 40. The composition of claim 38, wherein the concentration of the anti-PD-1 mAb is  $\geq$ 75 mg/mL.
- 41. The composition of any of claims 35-40, further comprising about 5 mM to about 20 mM buffer.
  - 42. The composition of any of claims 33-39, further comprising about  $0.01\,\%$  to about  $0.10\,\%$  w/v non-ionic surfactant.
- 10 43. The composition of any of claims 33-40, further comprising a second active pharmaceutical ingredient (API).
  - 44. The composition of claim 43, wherein the second API is a small molecule or a biologic.
  - 45. A method of treating cancer in a human patient comprising administering the crystal of any of claims 31-34, the crystalline pembrolizumab of any of claims 35-37, or the composition of any of claims 38-44 to a human patient in need thereof.
- 20 46. The method of claim 45, wherein the crystal or the composition is administered to the patient intravenously or subcutaneously.

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- 47. The method of claim 45 or 46, wherein the cancer is selected from the group consisting of: melanoma, non-small cell lung cancer, small cell lung cancer, Hodgkin lymphoma, head and neck cancer, primary mediastinal large B-cell lymphoma, urothelial carcinoma, gastric cancer, esophageal cancer, renal cancer, endometrial cancer, hepatocellular carcinoma, merkel cell carcinoma, and cervical cancer.
- 48. The method of claim 45 or 46, wherein the cancer is a microsatellite instability-high or mismatch repair deficient solid tumor or colorectal cancer.
  - 49. The method of claim 45 or 46, wherein the patient's tumor has a high mutational burden.

- 50. The method of any of claims 45 to 48, wherein the dosage of anti-PD-1 mAb is 200 mg, which is administered to the patient about every 3 weeks.
- 51. The method of any of claims 45 to 48, wherein the dosage of crystalline mAb is 400 mg, which is administered to the patient about every 6 weeks.

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To, The Controller of Patents The Patent Office at Chennai