CLAIMS

1. A solid dosage form comprising from 10 wt% to 35 wt% of palbociclib, from 5 wt% to 25 wt% of succinic acid, and a pharmaceutically acceptable carrier.

2. The solid dosage form of claim 1 comprising about 20 wt% of palbociclib.

3. The solid dosage form of claim 1 or 2 comprising from 5 wt% to 15 wt% of succinic acid, and preferably about 10 wt% of succinic acid.

4. The solid dosage form of any one of claims 1 to 3, wherein the pharmaceutically acceptable carrier comprises at least one diluent, and wherein the diluent comprises from 50 wt% to 75 wt% of the solid dosage form.

5. The solid dosage form of claim 4, wherein the diluent is selected from the group consisting of microcrystalline cellulose, lactose monohydrate, mannitol, sorbitol, xylitol, magnesium carbonate, dibasic calcium phosphate and tribasic calcium phosphate.

6. The solid dosage form of any one of claims 1 to 5, wherein the pharmaceutically acceptable carrier comprises at least one lubricant, and wherein the lubricant comprises from 0.5 wt% to 10 wt% of the solid dosage form.

7. The solid dosage form of claim 6, wherein the lubricant is selected from the group consisting of magnesium stearate, calcium stearate, zinc stearate and sodium stearyl fumarate.

8. The solid dosage form of any one of claims 1 to 7, wherein the pharmaceutically acceptable carrier comprises at least one disintegrant, and wherein the disintegrant comprises from 5 wt% to 10 wt% of the solid dosage form.

9. The solid dosage form of claim 8, wherein the disintegrant is selected from the group consisting of crospovidone, croscarmellose sodium and sodium starch glycolate.

10. The solid dosage form of any one of claims 1 to 9, in the form of a tablet.

11. The solid dosage form of claim 10, wherein the tablet is film coated.

12. The solid dosage form of claim 10, wherein the tablet is a bilayer tablet.

13. The solid dosage form of any one of claims 10 to 12 wherein the tablet is prepared by dry granulation.

14. A solid dosage form of any one of claims 1 to 13, wherein the dosage form when added to a test medium comprising 500 mL of 10 mM pH 5.5 acetate buffer at 37°C in a standard USP 2 rotating paddle apparatus with the paddles spinning at 50 rpm dissolves: (a) not less than 35% of the palbociclib in 15 minutes; (b) not less than 45% of the palbociclib in 30 minutes; (c) not less than 55% in 60 minutes; or (d) two or more of (a), (b) and (c).

15. A solid dosage form of any one of claims 1 to 13, wherein the dosage form when added to a test medium comprising 500 mL of 50 mM pH 6.5 phosphate buffer and 0.1 M NaCl at 37°C in a standard USP 2 rotating paddle apparatus with the paddles spinning at 50 rpm dissolves: (a) not less than 40% of the palbociclib in 15 minutes; (b) not less than 35% of the palbociclib in 30 minutes; (c) not less than 25% of the palbociclib in 60 minutes; or (d) two or more of (a),(b) and (c).

16. A solid dosage form of any one of claims 1 to 13, wherein the dosage form: (a) has a mean fed/fasted ratio of the area under the plasma concentration versus time curve (AUC) from 0.8 to 1.25 after administration of a single oral dose to a subject; (b) has a mean fed/fasted ratio of the maximum plasma concentration (C_{max}) from 0.8 to 1.25 after administration of a single oral dose to a subject; or (c) both (a) and (b).

17. A solid dosage form of any one of claims 1 to 13, wherein the dosage form: (a) provides a mean fasted AUC in the range of 80% to 125% of the mean fasted AUC for a control immediate release (IR) oral capsule containing an equivalent amount of palbociclib after administration of a single oral dose to a subject; (b) provides a mean fasted C_{max} in the range of 80% to 125% of the mean fasted C_{max} for a control immediate release (IR) oral capsule containing an equivalent amount of palbociclib after administration of a single oral dose to a subject; or (c) both (a) and (b).

18. A solid dosage form of any one of claims 1 to 13, wherein the dosage form provides: (a) a mean AUC in the presence of a proton pump inhibitor (PPI) in the range of 80% to 125% of the mean AUC in the absence of the PPI after administration of a single oral dose to a subject; (b) a mean C_{max} in the presence of a proton pump inhibitor (PPI) in the range of 80% to 125% of the mean C_{max} in the absence of the PPI after administration of a single oral dose to a subject; or (c) both (a) and (b).

19. The solid dosage form of claim 18, wherein the PPI is rabeprazole.

20. A solid dosage form of any one of claims 1 to 13, wherein the dosage form exhibits less than 0.05% acid adduct by weight after storage for 1 years at 25°C and 60% RH.

21. The solid dosage form of any one of claims 1 to 20, wherein the amount of palbociclib in the dosage form is 25 mg, 75 mg, 100 mg or 125 mg.

22. The solid dosage form of claim 21, wherein the amount of palbociclib in the dosage form is 125 mg.

23. The solid dosage form of any one of claims 1 to 22 wherein palbociclib is present in crystalline or amorphous form, or in a mixture of amorphous and crystalline forms.

24. The solid dosage form of any one of claims 1 to 23 for use in the treatment of cancer.