Claims

1. A crystalline form of gemcitabine-[phenyl-benzoxy-L-alaninyl)]-(*S*)-phosphate, characterised in that said crystalline form has an XRPD pattern with at least four peaks at 2θ selected from 4.9 ± 0.2, 6.8 ± 0.2, 9.1 ± 0.2, 10.4 ± 0.2, 20.3 ± 0.2 and 21.0 ± 0.2 when measured using Cu radiation with a $K_{\alpha 2}$ / $K_{\alpha 1}$ ratio of 0.5.

2. A crystalline form of claim 2, characterised in that said crystalline form has an XRPD pattern with peaks at 4.9 ± 0.2, 6.8 ± 0.2, 9.1 ± 0.2, 10.4 ± 0.2, 20.3 ± 0.2 and 21.0 ± 0.2 when measured using Cu radiation with a $K_{\alpha 2}$ / $K_{\alpha 1}$ ratio of 0.5.

3. A crystalline form of claim 1, characterised in that said crystalline form has an XRPD pattern substantially as shown in Figure 1.

4. A crystalline form of any one of claims 1 to 3, characterised in that said crystalline form has an FTIR pattern, when measured as a suspension in Nujol, substantially as provided in Example 3.

5. A crystalline form of any one of claims 1 to 4, characterised in that differential scanning calorimetry and/or thermogravimetric/differential thermal analysis of the crystal form shows an endotherm at 125.7 ± 2.0 °C.

6. A crystalline form of claim 5, characterised in that said endotherm is at 125.7 ± 0.5 °C.

7. A crystalline form of gemcitabine-[phenyl-benzoxy-L-alaninyl)]-(*S*)-phosphate, characterised in that said crystalline form has an FTIR pattern, when measured as a suspension in Nujol, substantially as provided in Example 3.

8. A crystalline form of claim 7, characterised in that differential scanning calorimetry and/or thermogravimetric/differential thermal analysis of the crystal form shows an endotherm at 125.7 ± 2.0 °C.

9. A crystalline form of claim 8, characterised in that said endotherm is at 125.7 ± 0.5 °C.

10. A crystalline form of gemcitabine-[phenyl-benzoxy-L-alaninyl)]-(*S*)-phosphate, characterised in that differential scanning calorimetry and/or thermogravimetric/differential thermal analysis of the crystal form shows an endotherm at 125.7 ± 2.0 °C.

11. A crystalline form of claim 10, characterised in that said endotherm is at 125.7 ± 0.5 °C.