

presence of a B-Raf or K-Ras mutation correlates with a decrease in sensitivity of the cell to the AKT inhibitor.

19. The method of any one of claims 1-18, wherein the method further comprises determining the localization profile of FOXO3a in the cell, wherein a cytoplasmic localization profile of FOXO3a correlates with sensitivity of the cell to inhibition by the Akt inhibitor.

20. The method of any one of claims 1-10 or 12-19, wherein the tumor cell is a prostate, ovarian, breast, gastric, or pancreatic cancer cell.

21. The method of claim 20, wherein the tumor cell is an endocrine resistant breast cancer cell.

22. The method of any one of claims 1-21, wherein the method further comprises determining the INPP4B, PHLPP, and/or PP2A status of the cell, wherein INPP4B, PHLPP, and/or PP2A loss correlates with increased sensitivity to the inhibitor.

23. The method of any one of claims 1-22, wherein the AKT inhibitor is (S)-2-(4-chlorophenyl)-1-(4-((5R,7R)-7-hydroxy-5-methyl-6,7-dihydro-5H-cyclopenta[d]pyrimidin-4-yl)piperazin-1-yl)-3-(isopropylamino)propan-1-one, or a pharmaceutically acceptable salt thereof.

24. The method of any one of claims 1-23, further comprising ~~obtaining a physiological sample from a patient for determining the presence of the mutation to~~ AKT.

25. ~~The method of claim 24, further comprising determining the presence of the mutation to AKT in the physiological sample~~ obtained from a patient.

~~26-25.~~ The method of any one of claims 1-~~25~~24, further comprising informing a patient for whom the presence of a mutation to AKT is determined that an AKT inhibitor should be administered.

27.26. The method of any one of claims 1-~~25~~24, further comprising informing a patient for whom the presence of a mutation to AKT is determined that an AKT inhibitor should not be administered.

28.27. Use of GDC-0068 or a salt thereof in the manufacture of a medicament for treating a cancer cell having a mutation to AKT, wherein the presence of a mutation to AKT correlates with sensitivity of the cell to the AKT inhibitor, wherein the mutation corresponds to, or aligns with ~~corresponding to, or aligning with,~~ L52, K189 or D323.