Teaching unit 15

1. Main characteristics that tumor cells need to become malignant and survive.
2. PI3K-AKT-mTOR signaling
3. Different mechanisms of HIF-1 activation
4. Phosphoglycerate dehydrogenase (PHGDH) in mutational deregulation
5. Otto Warburg’s hypothesis
6. Protein biosynthesis
7. Fatty acids synthesis
8. RNA and DNA synthesis
9. Redox balance
10. Glycolysis targeting therapy
11. Mitochondrial metabolism targeting therapy
12. Autophagy and glutaminase inhibitors
13. ROS/antioxidant capacity targeting
14. Use of vitamin C in targeting tumor metabolism