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**Title of the project:** **Evaluation of binding affinity of cancer drug**

**candidates with cancer specific membrane protein**

**Keywords:** Binding energy, cancer drug, EpCAM

**Introduction​:** There are thousands of reports of natural or synthetic anticancer candidates, only a few numbers of natural or synthetic anticancer candidates enters into trading after successful clinical trial. There are about 10 (or more) well-known cancer drugs, mostly kills the cancer cells, and not to the normal cells. The mode of action of cancer drugs varies. Since the cancer drugs is mostly kills the cancer cells, that means this specificity might be due to affinity in between the cancer-associated membrane proteins (Boonstra et al. 2016) with the cancer drug.

**Objectives:** To unravel correlation between cell/tissue specificity of cancer drug and cancer specific membrane protein

**Methodology:** Molecular docking of anticancer and non-anticancer drug with

EpCAM (cancer specific membrane protein**)**

**Perspectives:** There must be some mechanism of entry of cancer drug inside the cancer cells so that to perform proper action of the cancer drug. If the specificity of cancer drug to cancer cells found to be dependent or inter-related then any natural or synthetic compound may be tested virtually for anticancer properties.

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