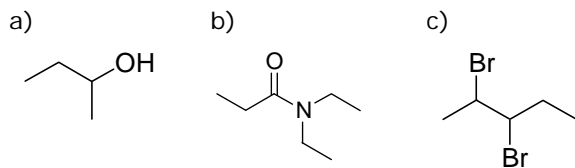
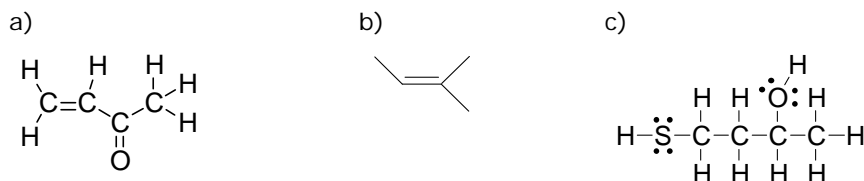


**OFL 2340 – Estrutura e Propriedade de Compostos Orgânicos**  
**Lista 01: Grupos Funcionais e Representação de Moléculas Orgânicas**

1. Converta as estruturas abaixo em estruturas de traço.



2. Escreva as estruturas na forma condensada.

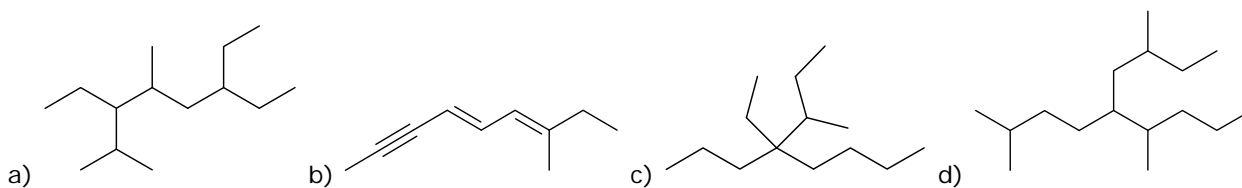


3. Represente os compostos orgânicos abaixo na forma de estrutura em linha.

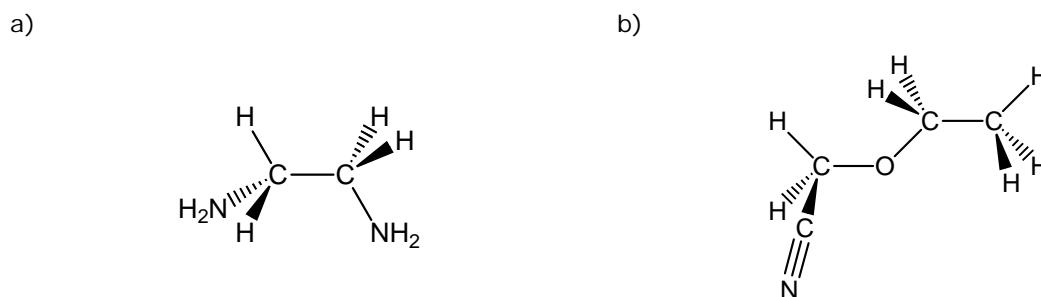


4. Determine nos compostos abaixo:

- i) O número de carbonos primários, secundários, terciários e quaternários.
- ii) A fórmula molecular de cada um dos compostos.



5. Converta as seguintes estruturas em linhas tracejadas e cunhas e identifique os grupos funcionais.



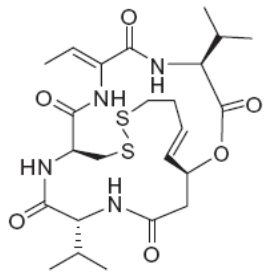
6. Escreva a estrutura dos isômeros constitucionais para

- a)  $\text{C}_6\text{H}_{14}$ .
- b)  $\text{C}_3\text{H}_8\text{O}$

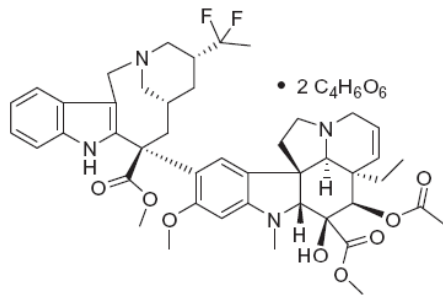
7. Considerando a estrutura dos fármacos que entraram no mercado em 2010, indique a parte da molécula que contenha:

- a) anel benzênico
- b) álcool primário (2 vezes), álcool secundário (3 vezes), álcool terciário
- c) amina primária, amina secundária, amina terciária
- d) ácido carboxílico
- e) lactona
- f) éster: 3 vezes
- g) alqueno dissubstituído
- h) alqueno tetrassubstituído
- i) éter metílico
- j) amida: 4 vezes
- k) uma metil cetona
- l) ciclopropano
- m) ciclopentano
- n) ciclo-hexano
- o) cloreto de arila: 2 vezes
- p) anilina
- q) fluoreto de alquila: 2 vezes
- r) nitrila
- s) oxaciclobutano, oxaciclopentano
- t) um carbono quaternário
- u) uma t-butila, uma i-propila
- v) fenol
- x) H alílico, H vinílico, H benzílico

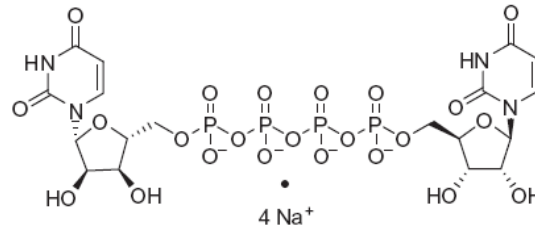
# Estrutura de 15 Novas Drogas que foram aprovadas para comercialização em 2010



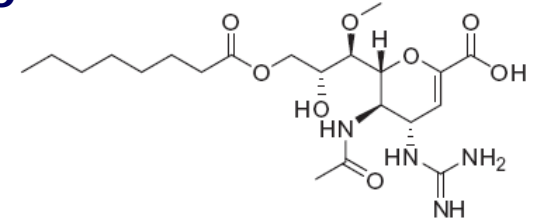
XIII Romidepsin



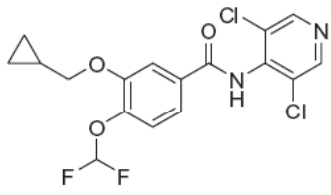
XV Vinflunine ditartrate



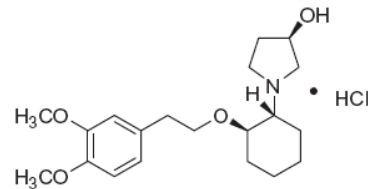
IV Diquafosol tetrasodium



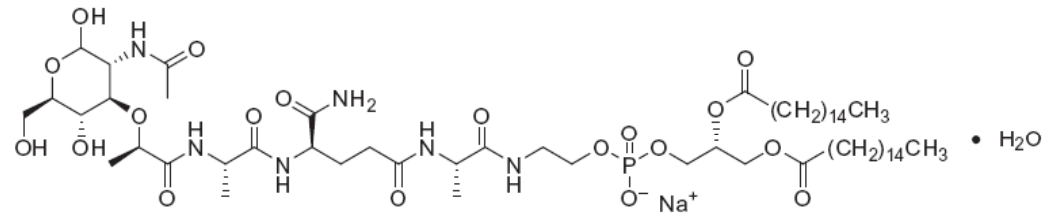
VIII Laninamivir octanoate



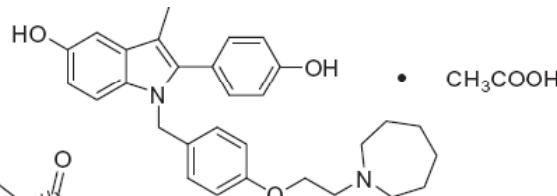
XII Roflumilast



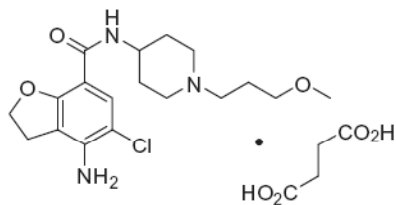
XIV Vernakalant hydrochloride



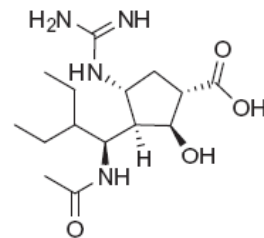
IX Mifamurtide



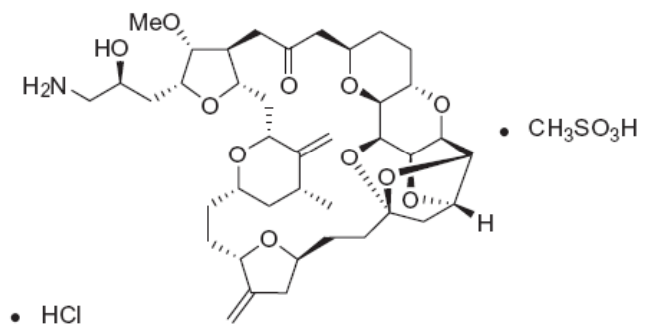
II Bazedoxifene acetate



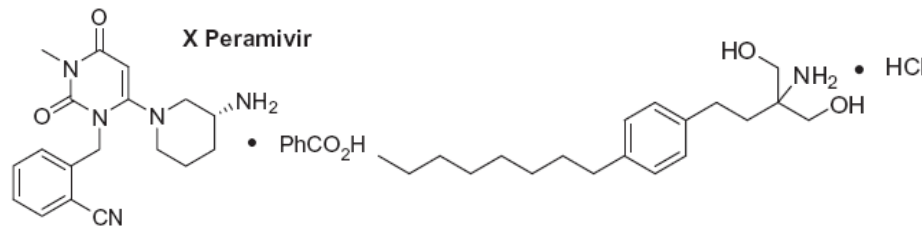
XI Prucalopride succinate



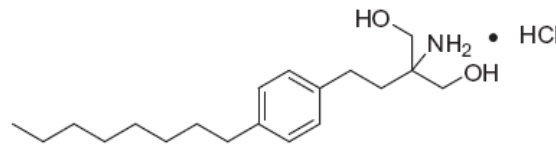
X Peramivir



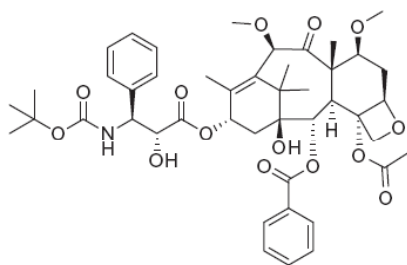
V Eribulin mesylate



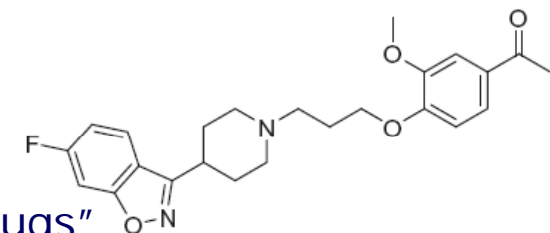
I Alogliptin benzoate



VI Fingolimod hydrochloride



III Cabazitaxel



VII Iloperidone

"Synthetic Approaches to the 2010 New Drugs"  
Liu et al., *Bioorg. Med. Chem.* **2012**, *20*, 1155.