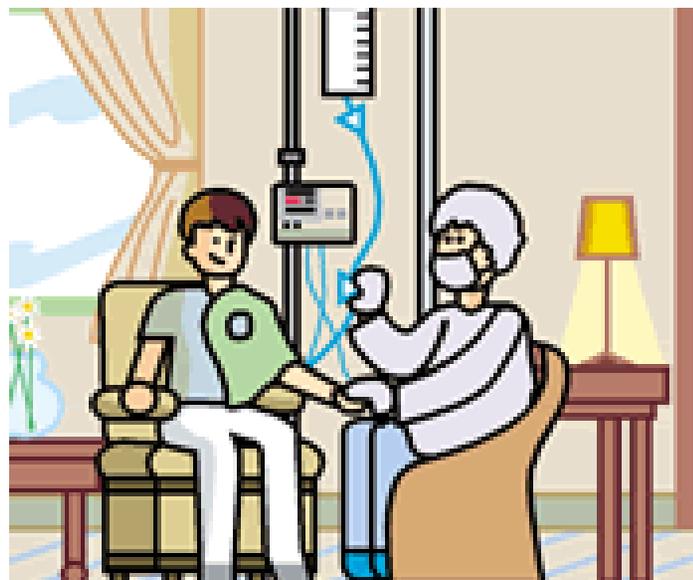


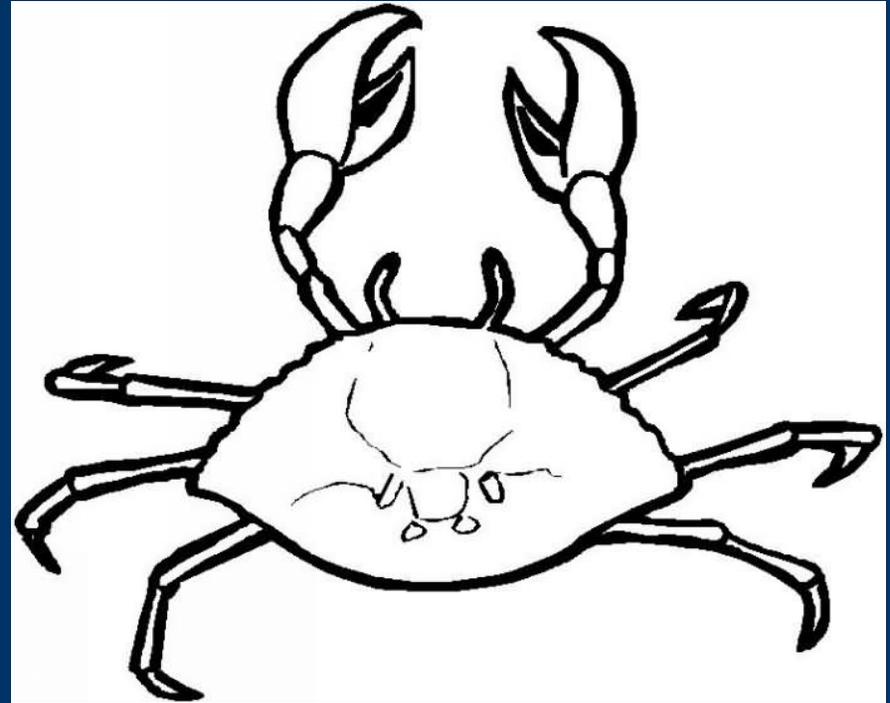
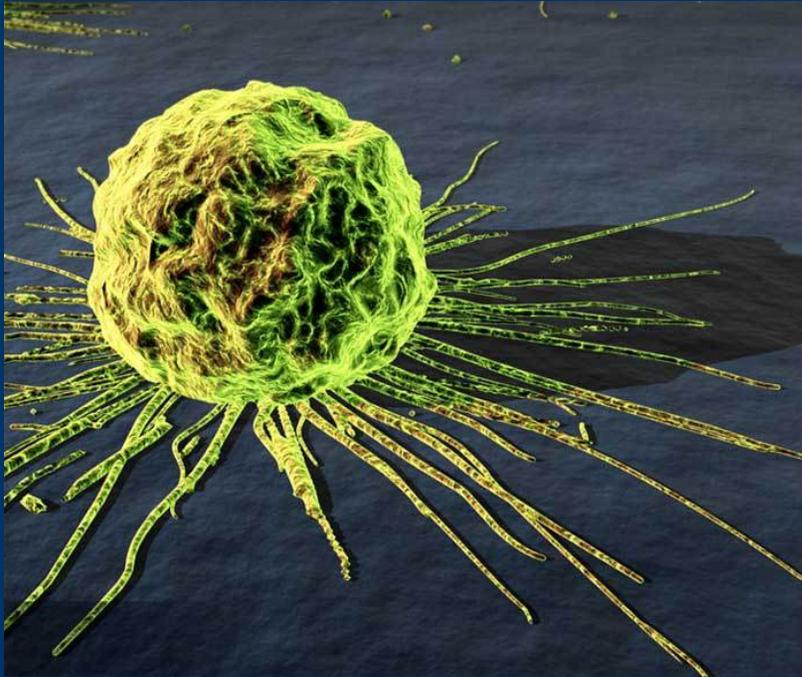
QUIMIOTERAPIA:



A Química em apoio à medicina no tratamento do câncer

*Por: Leticia Araujo de Oliveira
Bolsista PIBID, IQ-UNICAMP*

A doença: o Câncer



Origem do nome → *latim*

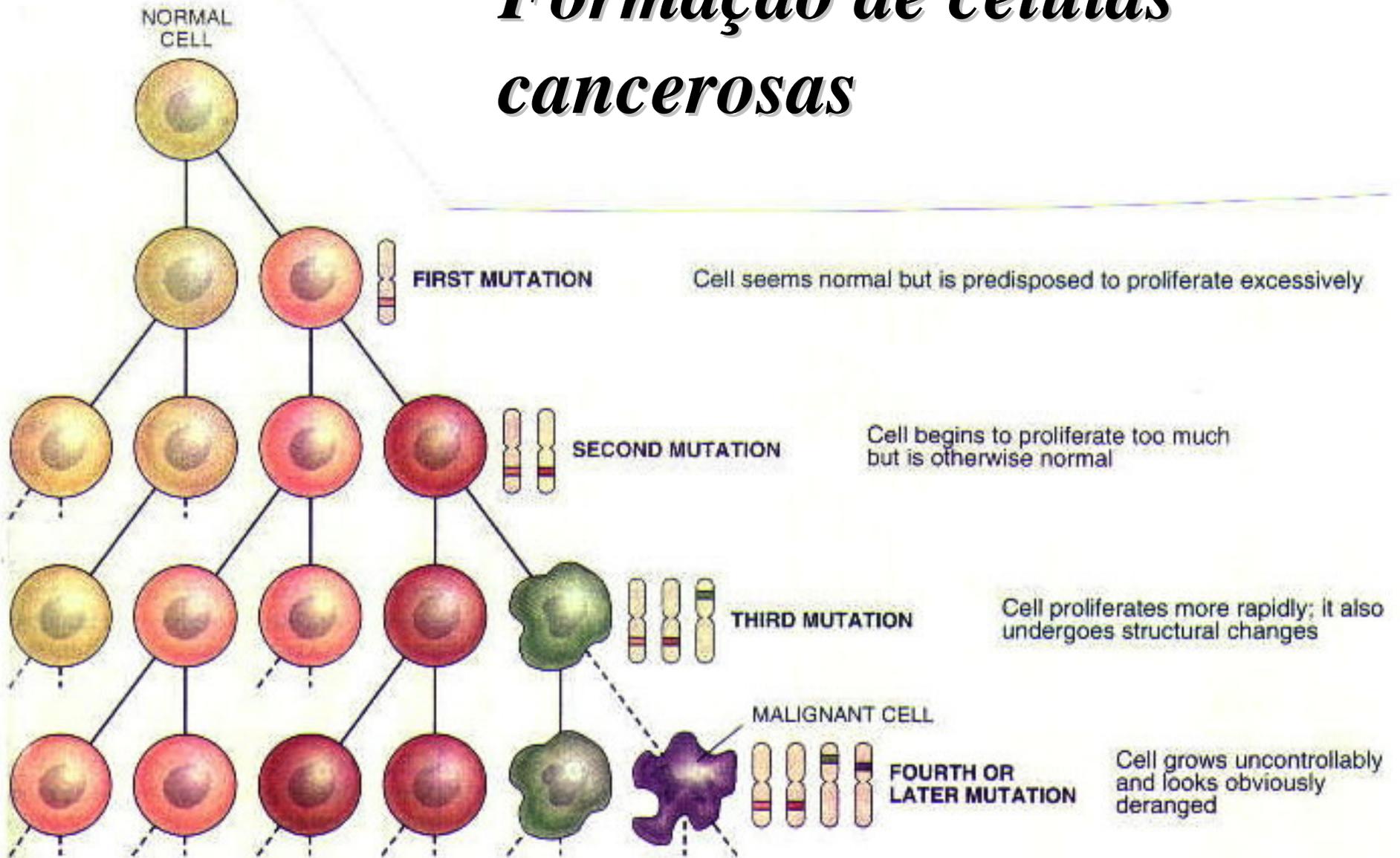


O QUE É CÂNCER?

Erros na replicação do DNA

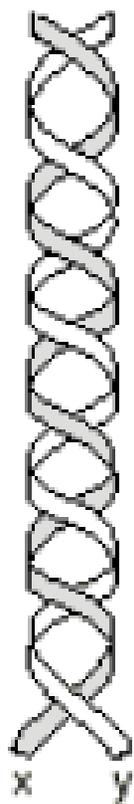


Formação de células cancerosas

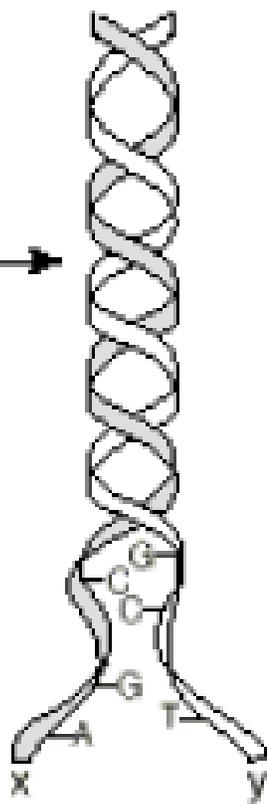


Replicação do DNA

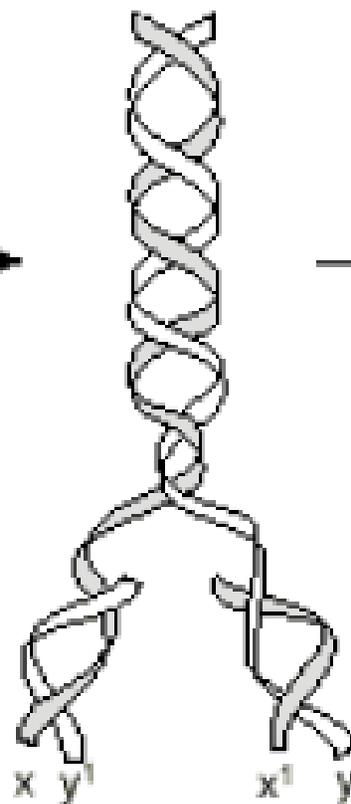
DNA REPLICATION



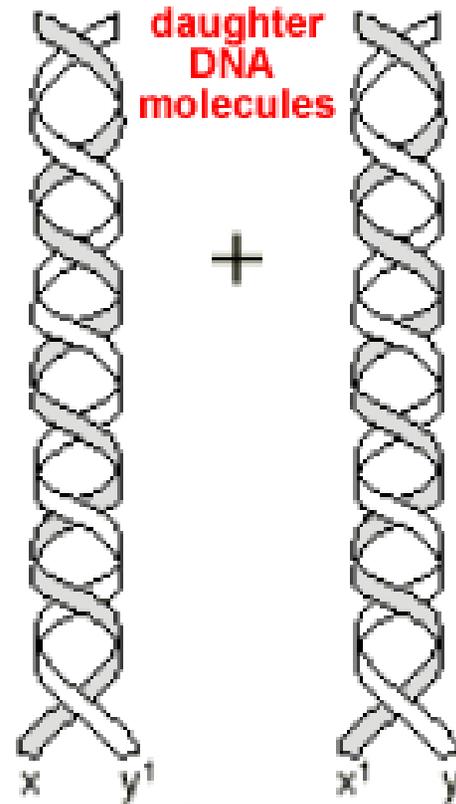
Parent DNA



Step 1
Unzipping



Step 2
Complementary
Base Pairing

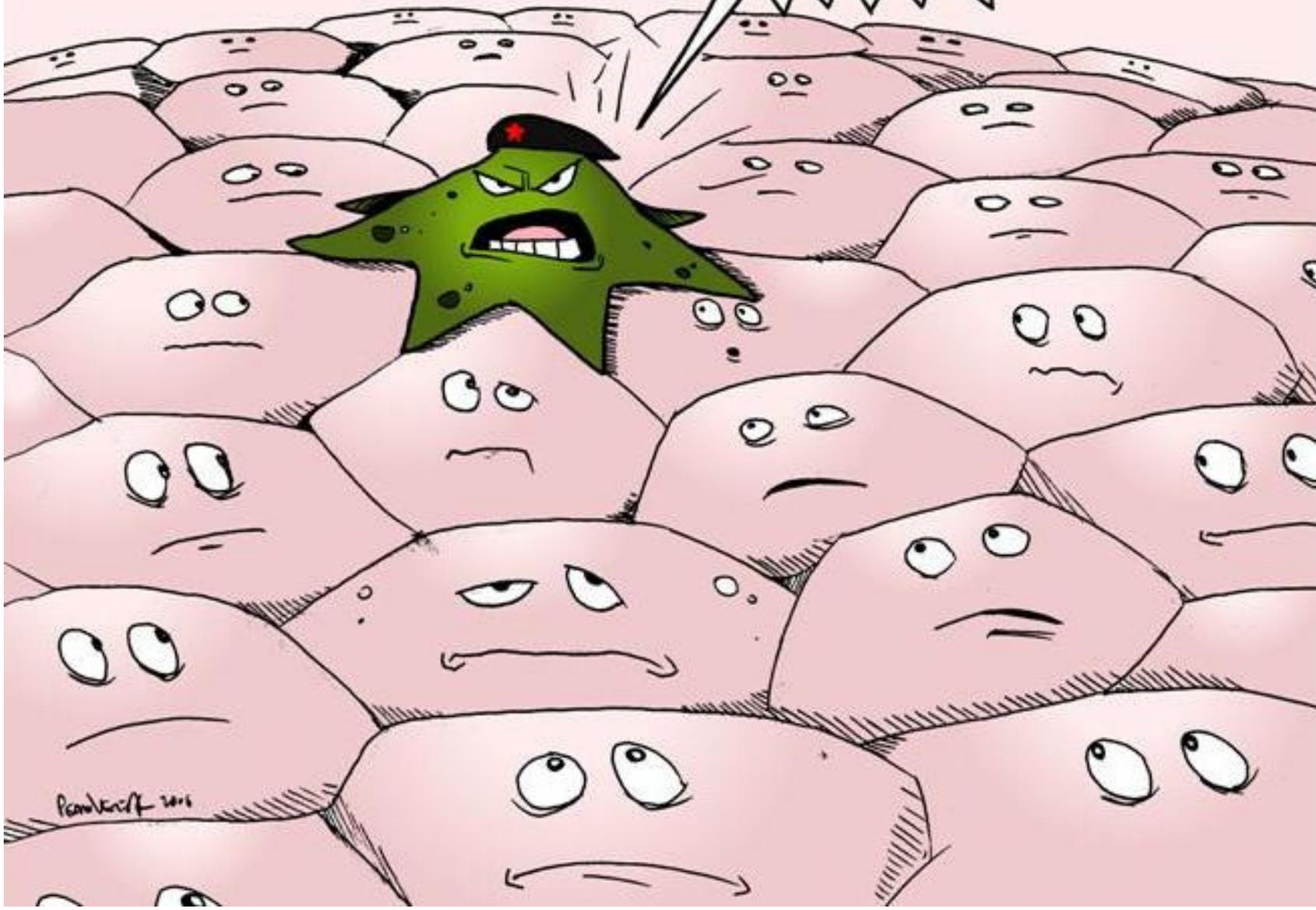


Two
semi-conservative
daughter
DNA
molecules

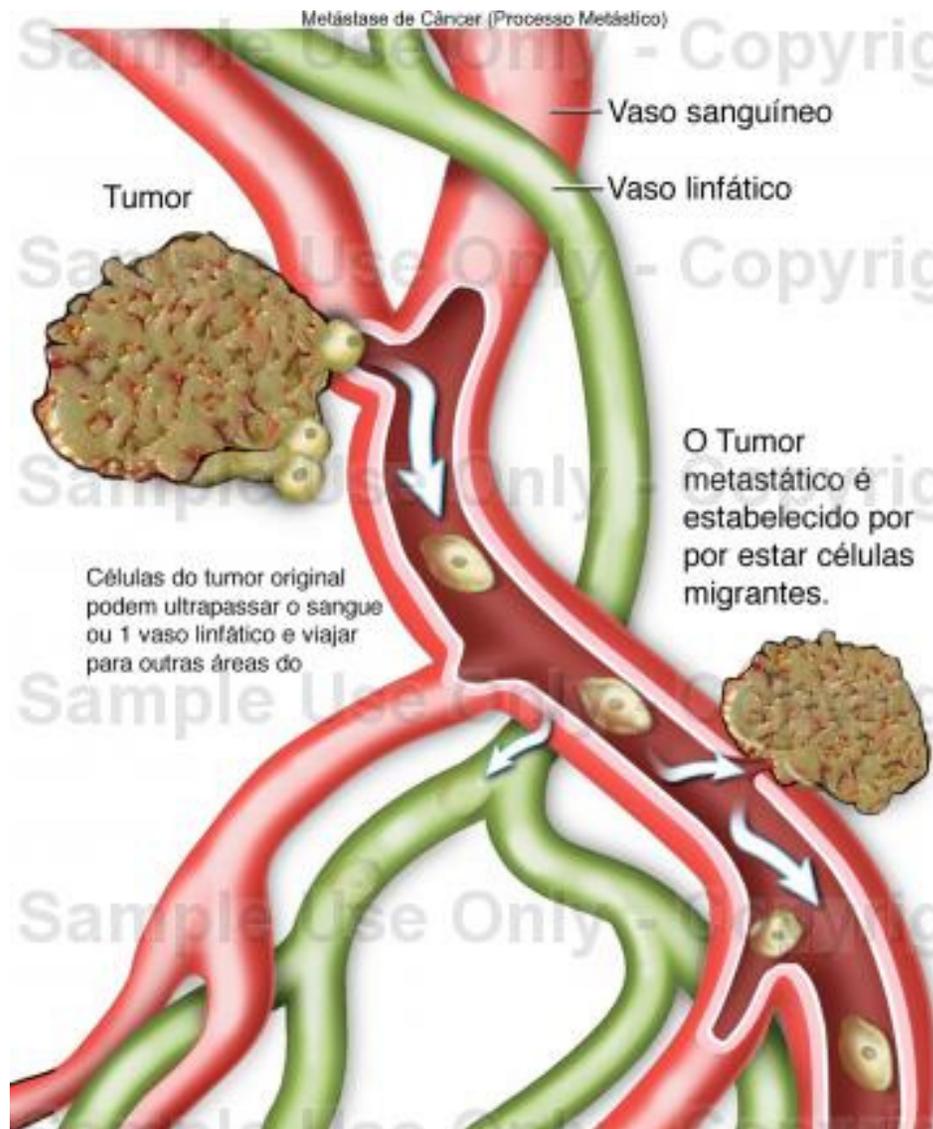
Step 3
Sugar-Phosphate Backbone
formed connecting nucleotides
in the two new strands

SOMEWHERE IN AN EPITHELIUM
A CANCER CELL EMANCIPATES...

DEATH TO THE SYSTEM!
DEATH TO THE SYSTEM!



Metástase: O Tumor Maligno

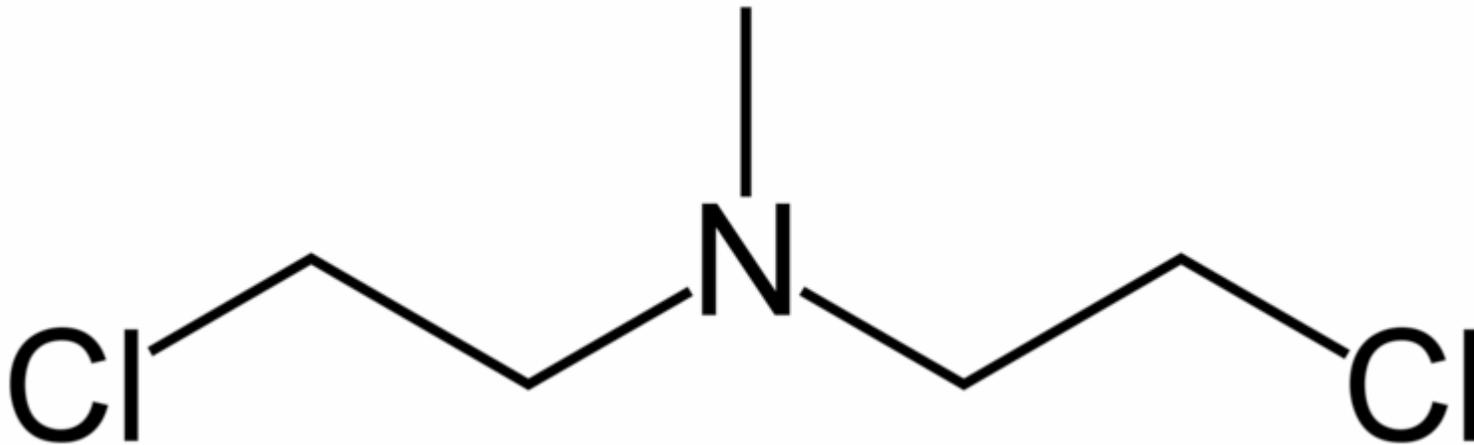


A Quimoterapia

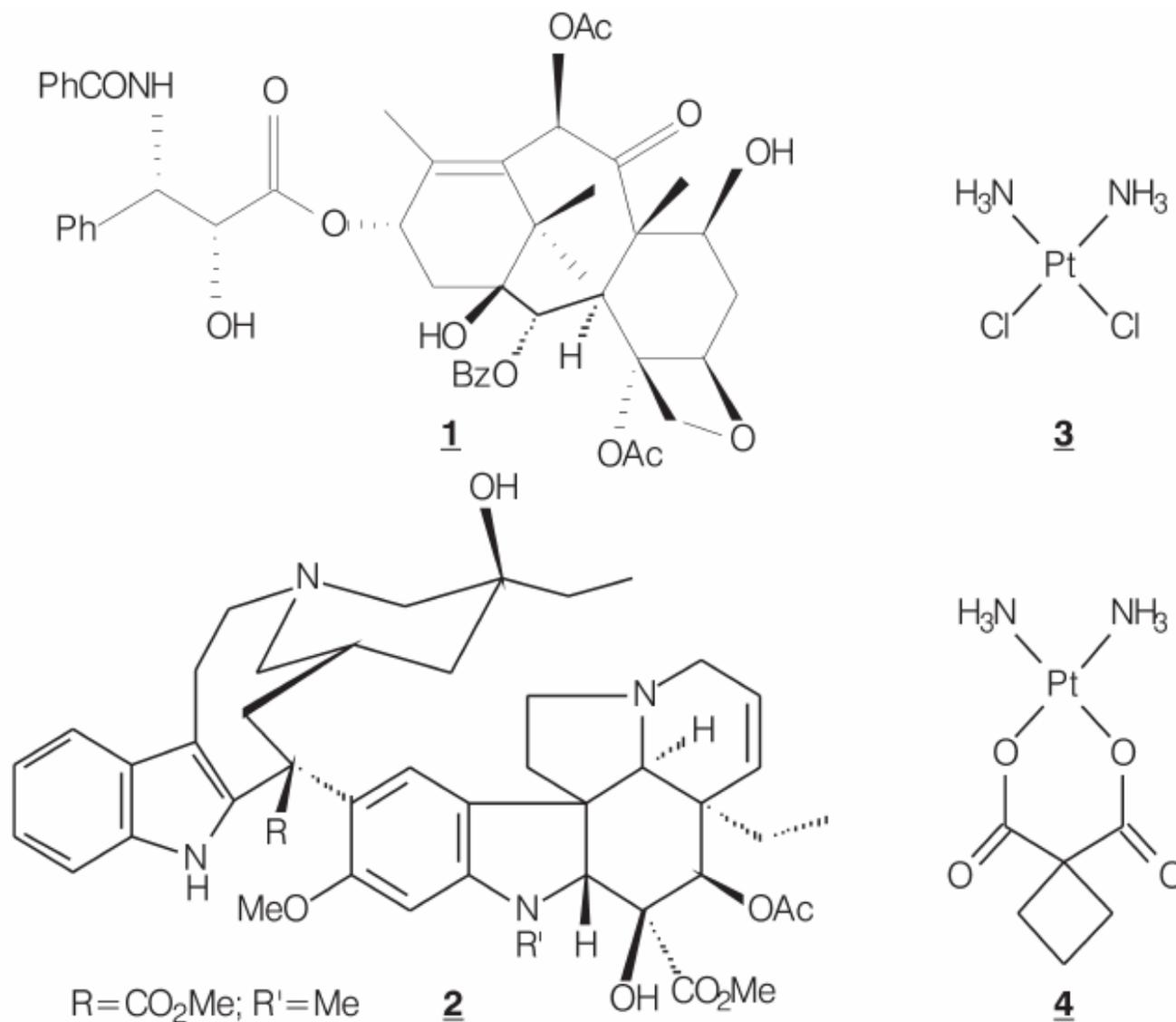


Mecloretamina

- Gás mostarda → primeira guerra mundial
- Agente alquilante
- Rápido crescimento → Tecido intestinal e sistema linfático
-



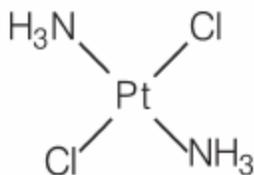
Compostos utilizados no tratamento do câncer:



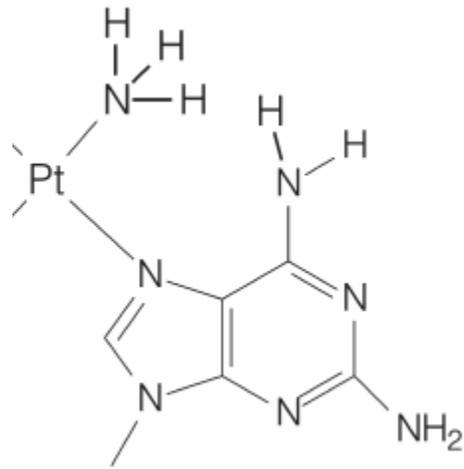
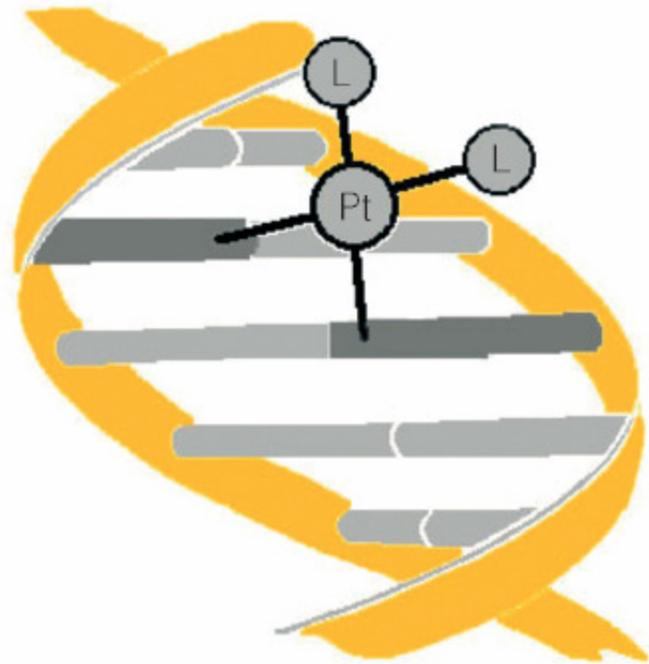
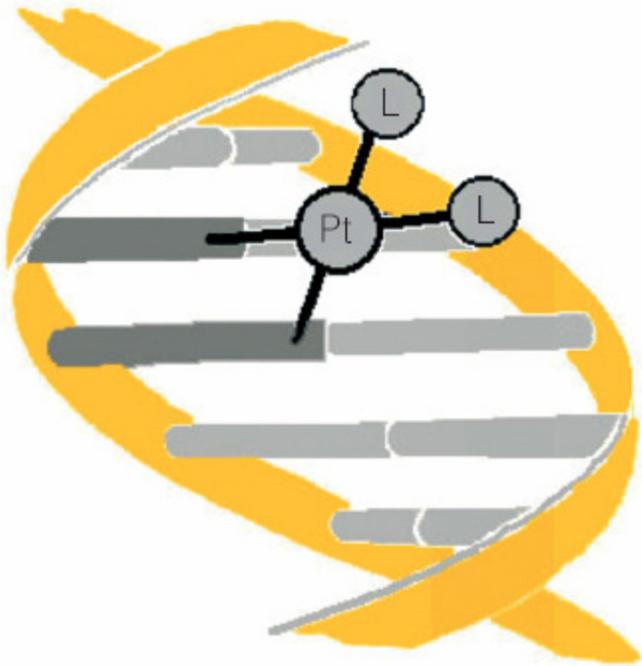
1: taxol; **2: vimblastina**; **3: cisplatin** e **4: carboplatin**.



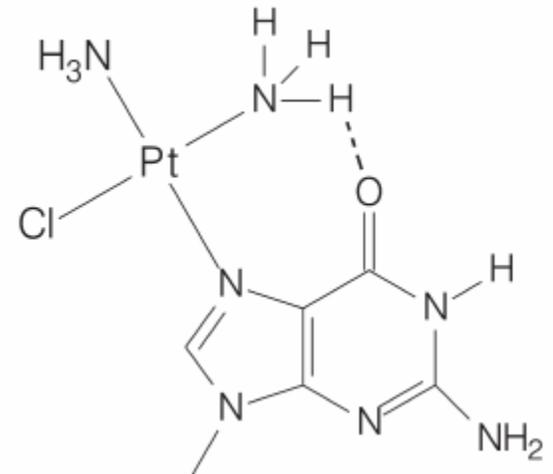
Uma das formas comerciais do cisplatina (produzida por Quiral Química do Brasil S.A.).



trans-
[(diaminodicloro)platina(II)]



Adenina



Guanina

Modo de ação da cisplatina:

