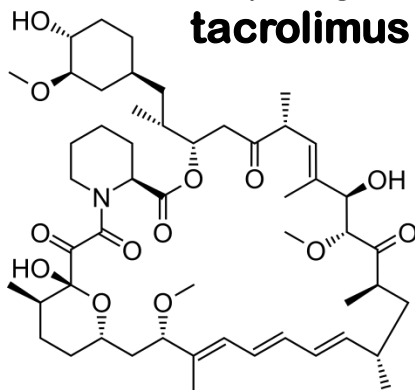


Uusien bioaktiivisten yhdisteiden löytäminen humalakannoista

Ville Paavilainen
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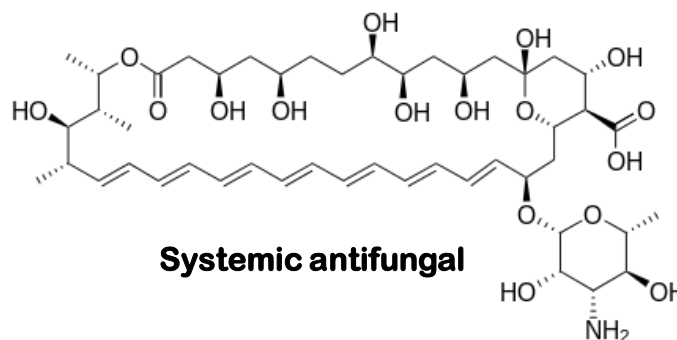
Natural product-derived therapeutics

**Rapamycin,
tacrolimus**



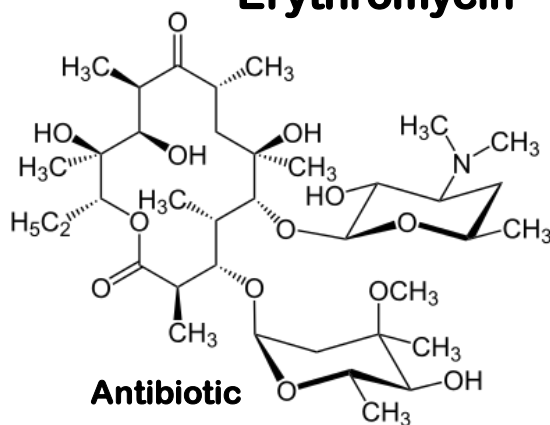
**immunomodulation,
cancer therapies**

Amphotericin B



Systemic antifungal

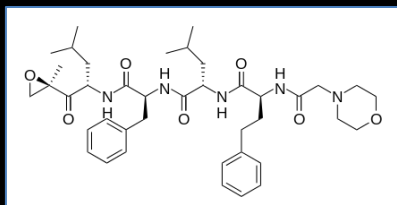
Erythromycin



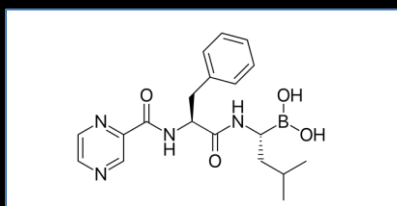
Antibiotic

Proteostasis-modulating small molecules

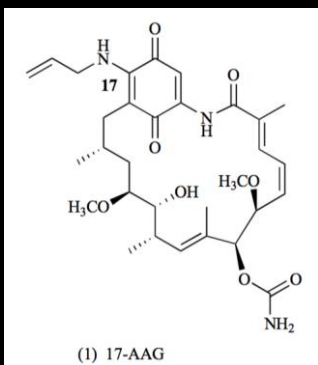
Carfilzomib



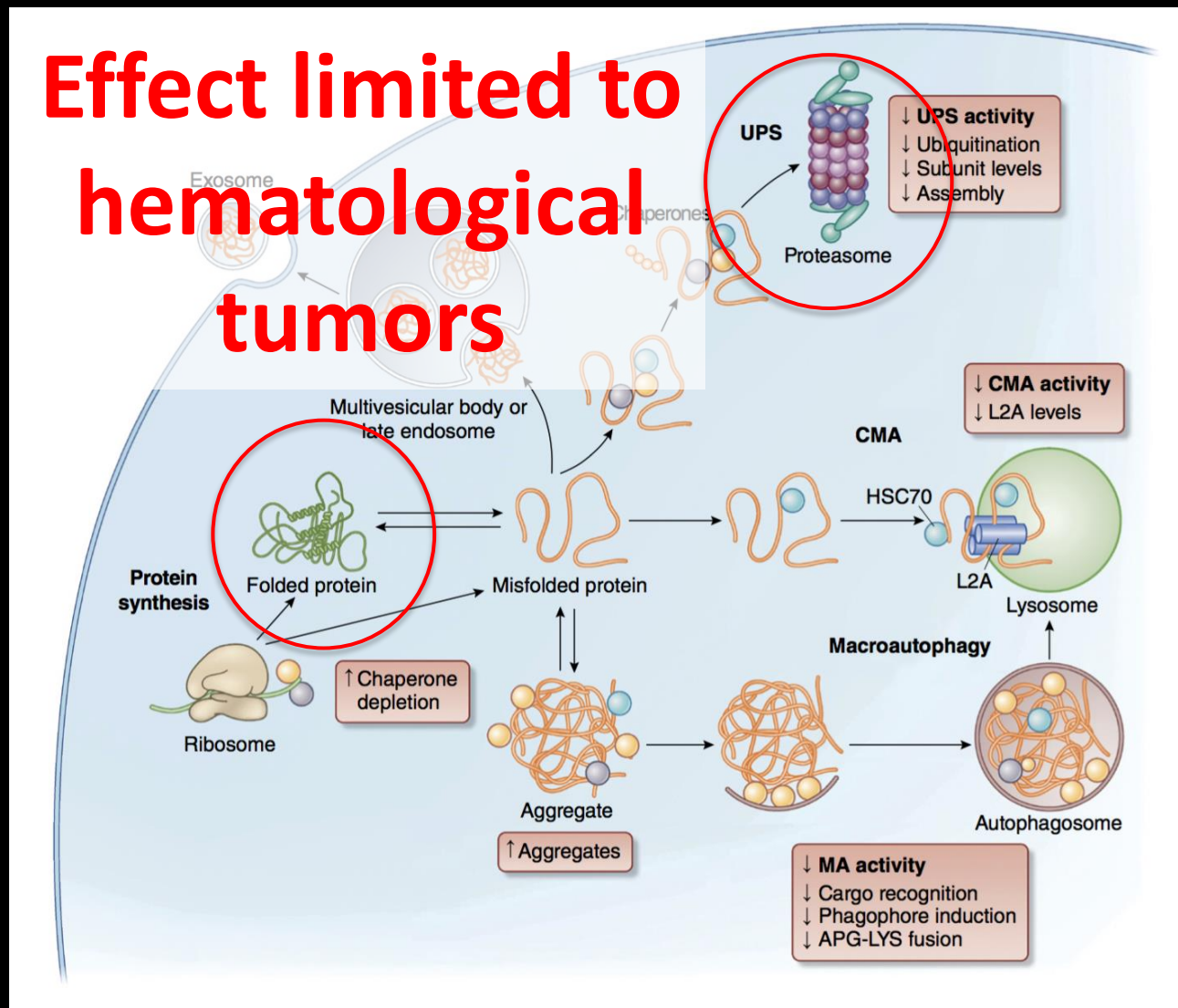
(Proteasome)



Bortezomib

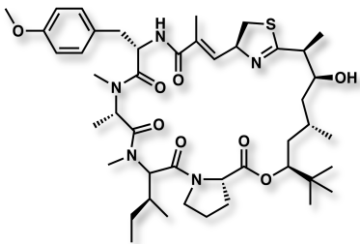
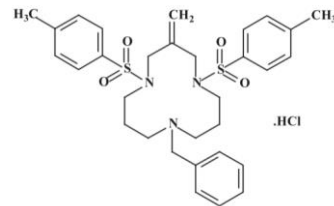


Geldanamycin (Hsp90)

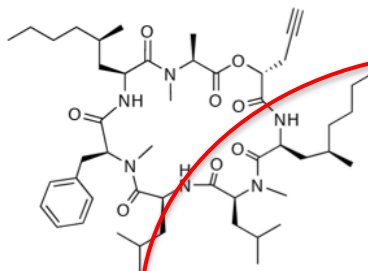


Inhibitors of secretory protein biogenesis

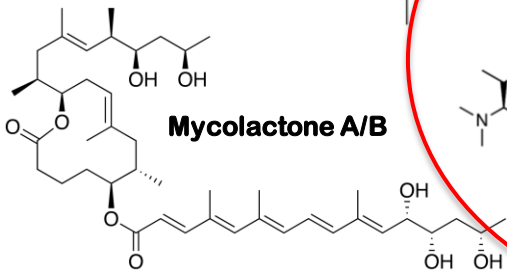
Apratoxin A

**CADA**

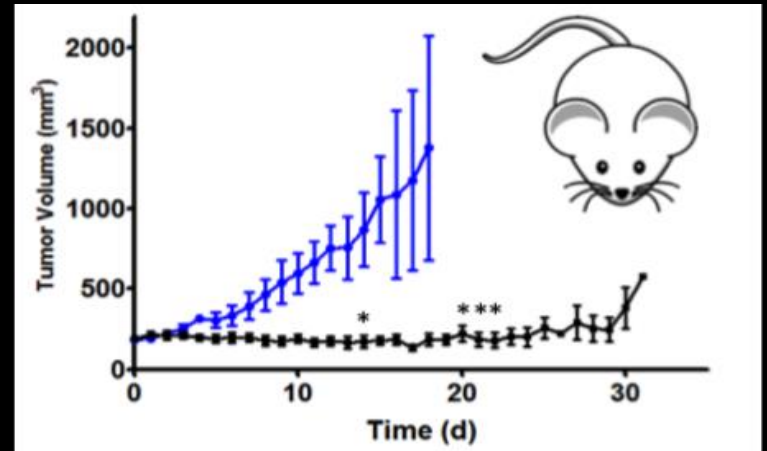
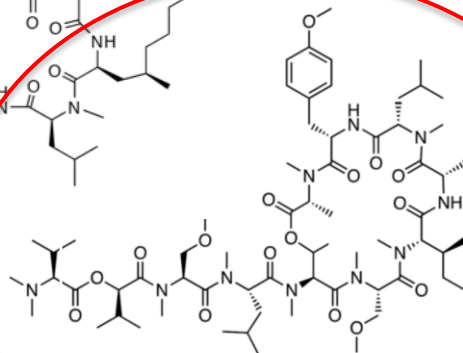
Cotransin



Mycolactone A/B

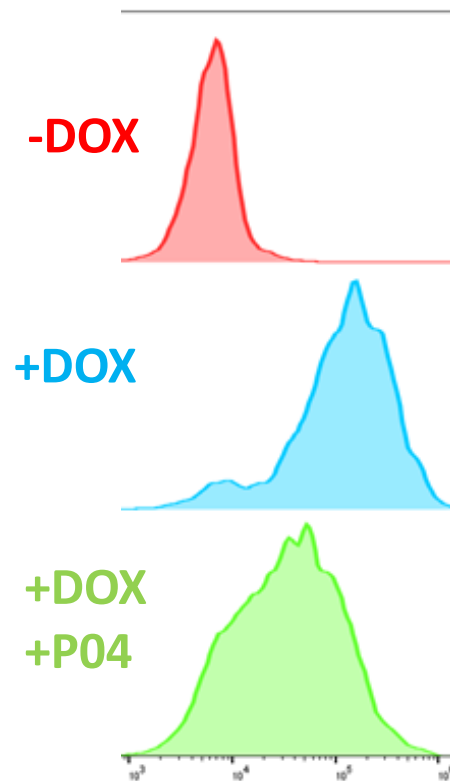
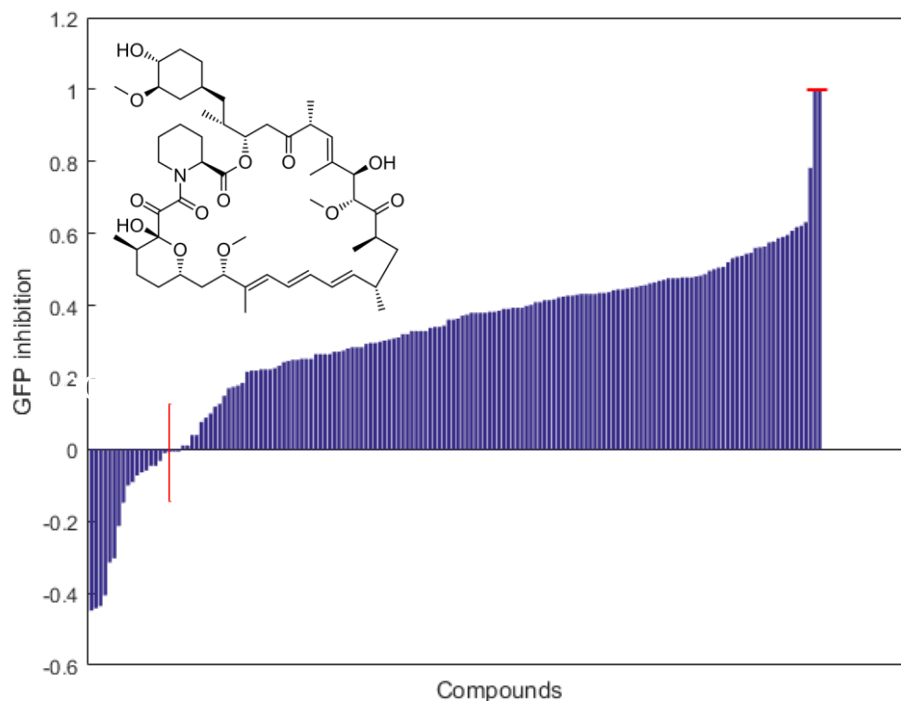


Coibamide



Ishmael et al. unpublished

Flow cytometry with iQueHD: Screening of 45000 Rapafucin analogs



Tulevaisuuden suunnitelmat

1. Humalakantojen tuottamien pienmolekyylien kemiallinen karakterisointi
2. Molekyylien bioaktiivisten ominaisuuksien tutkiminen (mm. proteiinien erityksen inhibiittorit) syöpäsolujen seulontatekniikoilla
3. Lupaavien kandidaattimolekyylien solumekanismien selvitys ja terapeutinen jatkokehitys