Goals of the HCV DRAG

The HBV Experience

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www.vidrl.org.au/publications/hep_updates.htm

HBV Sequence Database

HBV Genotypes: A-H (A-D major genotypes)

Several subtypes (eg Bj, Ba)

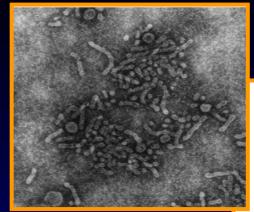
What is a drug associated mutation and what is a SNP?

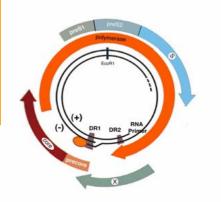
- Lack of matched samples (often no pretreatment)
- >> Establish comprehensive database

HCV consensus sequences stored on public databases

- hcv.lanl.gov
- euhcvdb.ibcp.fr
- s2as02.genes.nig.ac.jp

Hepatitis B: The Problem of Drug Resistance





Why is HBV Resistance a bigger issue than in HIV?

- One viral target the HBV Polymerase
- Only one class of drug (nucleos(t)ide analogues)
- But several alternative analogues
- Rarely used in combination

Correlation of Phenotypic Data with Clinical Data

- For HBV, no infectious assay
- Several alternative in vitro assays available
 - Difficult to standardize
- No defined threshold value for defining resistance (fold-change in EC₅₀)
- In vitro resistance may not correlate with clinical resistance

Definitions of Response?

Different responses to Antiviral Therapy

