FDA Perspective on Validation of Hepatitis In Vitro Diagnostic Assays

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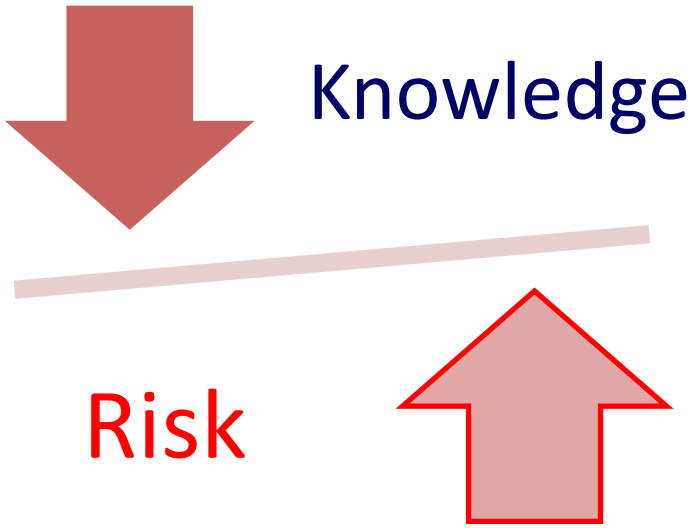
Risk Based Regulation of IVDs

Class I most 510(k) exempt



Class I - Low likelihood of harm
register & list (21CFR §807)
General Controls

Class II - Moderate likelihood of harm or risk can be mitigated
Special Controls

HAV
HCV
HDV?

Class III - High or unknown likelihood of harm
Significant Risk
Pre-market Approval

HBV

PreMarket Data Requirements

- **Analytical performance measures**
  - Precision (repeatability, reproducibility)
  - Accuracy
  - Reactivity (inclusivity)
  - Sensitivity, Limit of Detection
  - Specificity (interference, cross-reactivity)
  - Sample type / matrix
  - Sample preparation / conditions
  - Performance around the LLoQ and ULoQ, 'cutoffs'
  - Linearity
  - Potential for carryover, cross-hybridization
  - Stability
- Studies and specifications may vary depending on technology or other unique device characteristics
- Similar for Class II and Class III
- Qsub Program [Requests for Feedback and Meetings for Medical Device Submissions: The Q-Submission Program | FDA]

What Is Different In Class III and Class II Device Evaluation

- Manufacturing section: Complete study reports and documentation are required for Class III submissions. Similar studies are conducted but are not included in the FDA submission for Class II.
- Pre-approval inspection (GMP compliance) only for Class III (standard manufacturer inspections are unchanged) .
- BIMO (bioresearch monitoring visit to clinical and/or sponsor sites) for Class III submissions only.
- Post-approval: Requirements for annual reports for Class III approval, not for Class II clearance.
- Validation studies should test multiple lots in performance studies in Class III submissions.
- Stability protocols for Class III may differ from Class II submission and may include additional information.

Thank you

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