



The BeadXpress System: Maximizing Multiplexing Capabilities for Infectious Disease Testing

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VeraCode[®] Holographic Microbead Technology

- ▶ Cylindrical glass microbeads
- ▶ 240 μm length x 28 μm diameter



BeadXpress™ Reader: Specifications

SAMPLE DELIVERY FORMAT

- ▶ Standard 96-well plate & 8-well strip plates

MULTIPLEXING PER SINGLE WELL

- ▶ 1 to 384

DETECTION

- ▶ Optional 1 or 2 color detection

THROUGHPUT

- ▶ 120 samples/hr at 10-plex
- ▶ 80 samples/hr at 96-plex

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Enabling Clinical Early Adopter



FDA cleared BeadXpress System

Regulated device ensures quality and performance standards are met for clinical laboratories



General Purpose Reagent Beads

Enables customers to develop their own assays using royalty-free beads



Path to FDA Submissions

BeadXpress clearance and GMP reagents create a platform for follow-on diagnostic development

Enabling Diagnostic Partners



Signed agreements with EraGen:

Expanded Menu

EraGen can port content to BeadXpress

EraGen potential transfer menu includes:

- CFTR, Factor II/IV, MTHFR
- Respiratory Viral Panel
- CYP2C9 & VKORC1

Improved Workflow

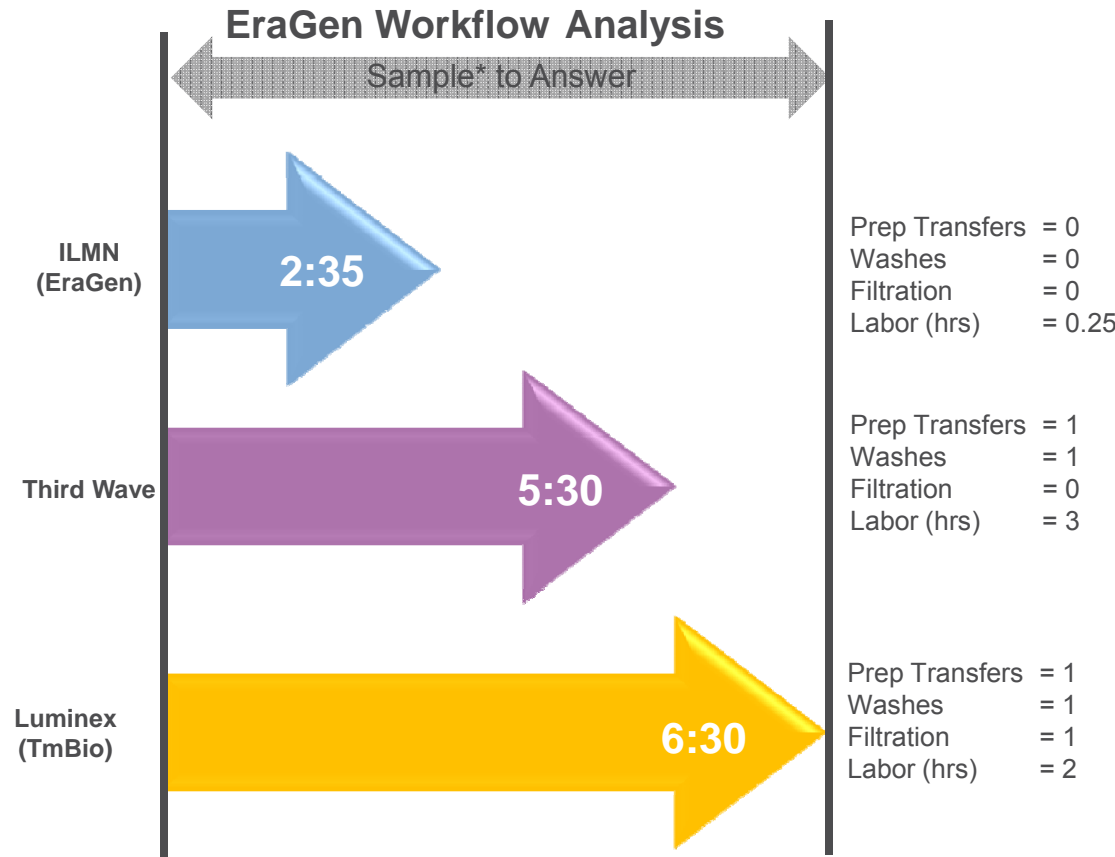
Faster chemistry on BeadXpress

- Reduced labor costs
- Faster turnaround
- Enables further menu expansion in infectious disease

BeadXpress 510(k) Clearance Removes a Significant Hurdle for development of diagnostic tests by Partners

Multiplex Assay Workflow Comparison

Automation Friendly



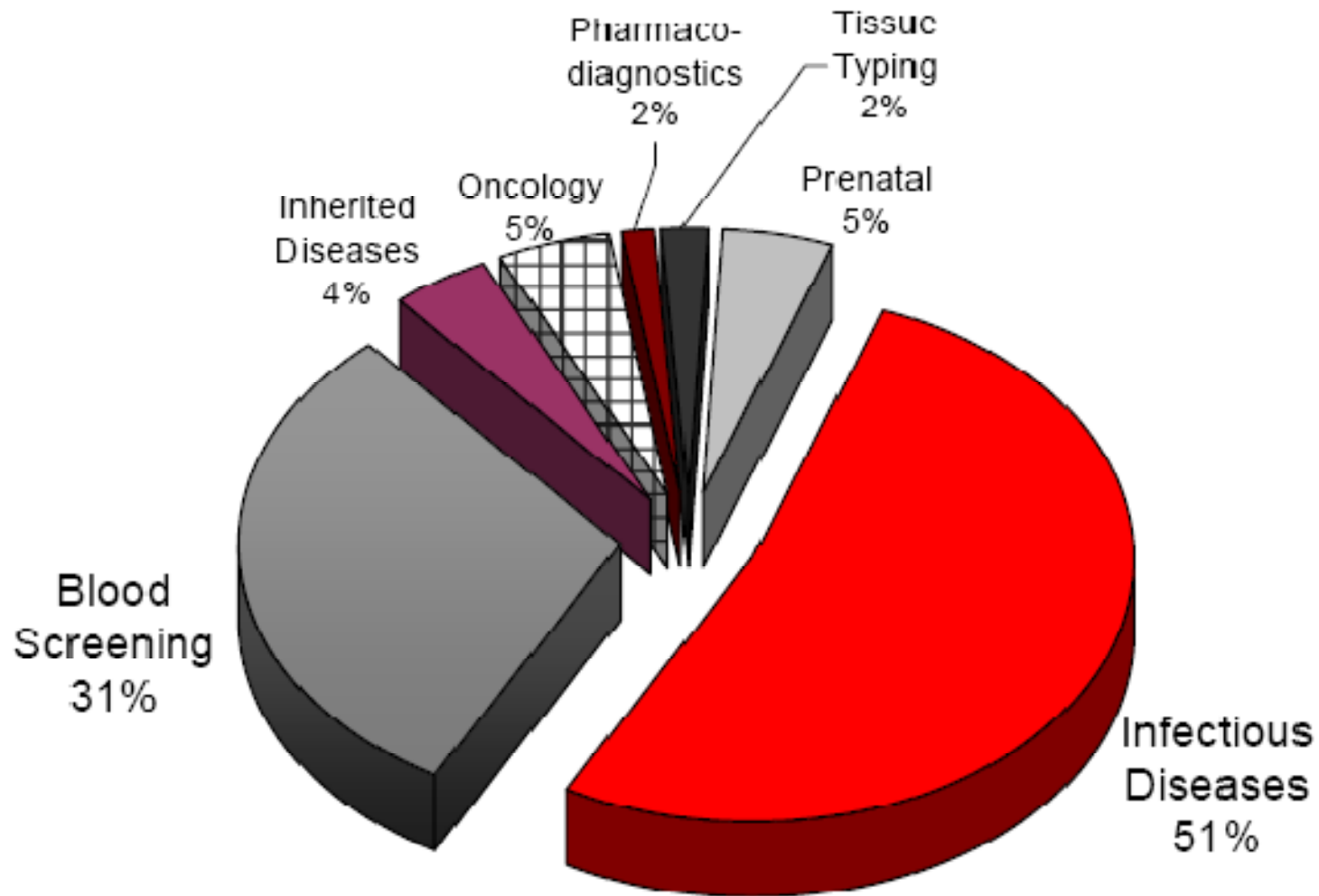
Step	Description	Time
RXN Setup	20 µL Master Mix 10 µL Sample	0:05
PCR	Amplify and Label	1:30
Hyb Setup	50 µL Hybridization Buffer 30 µL Reaction	0:05
Hybridization	Room Temperature @ 850 RPM	0:15
BeadXpress	Read Full Plate (96 Samples)	0:40

**96 Clinical Specimens
Total Assay Time: 2:35**

*Workflows start from extracted DNA



Molecular Diagnostic Market Segments



GTATCATTAAAGATTACTTTGATCCACTGATTCACGTTACCGTAAACGAAACGATCAATTGAGACTAAATATTAACGTACCAATTAAGAGCTACCGTCCAAACGACGAAAGAAATGATAACAGTAACACACTTCTGTTAACCTTAAGCGAACGTATCATT
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Advantages of Multiplexed Molecular Panels

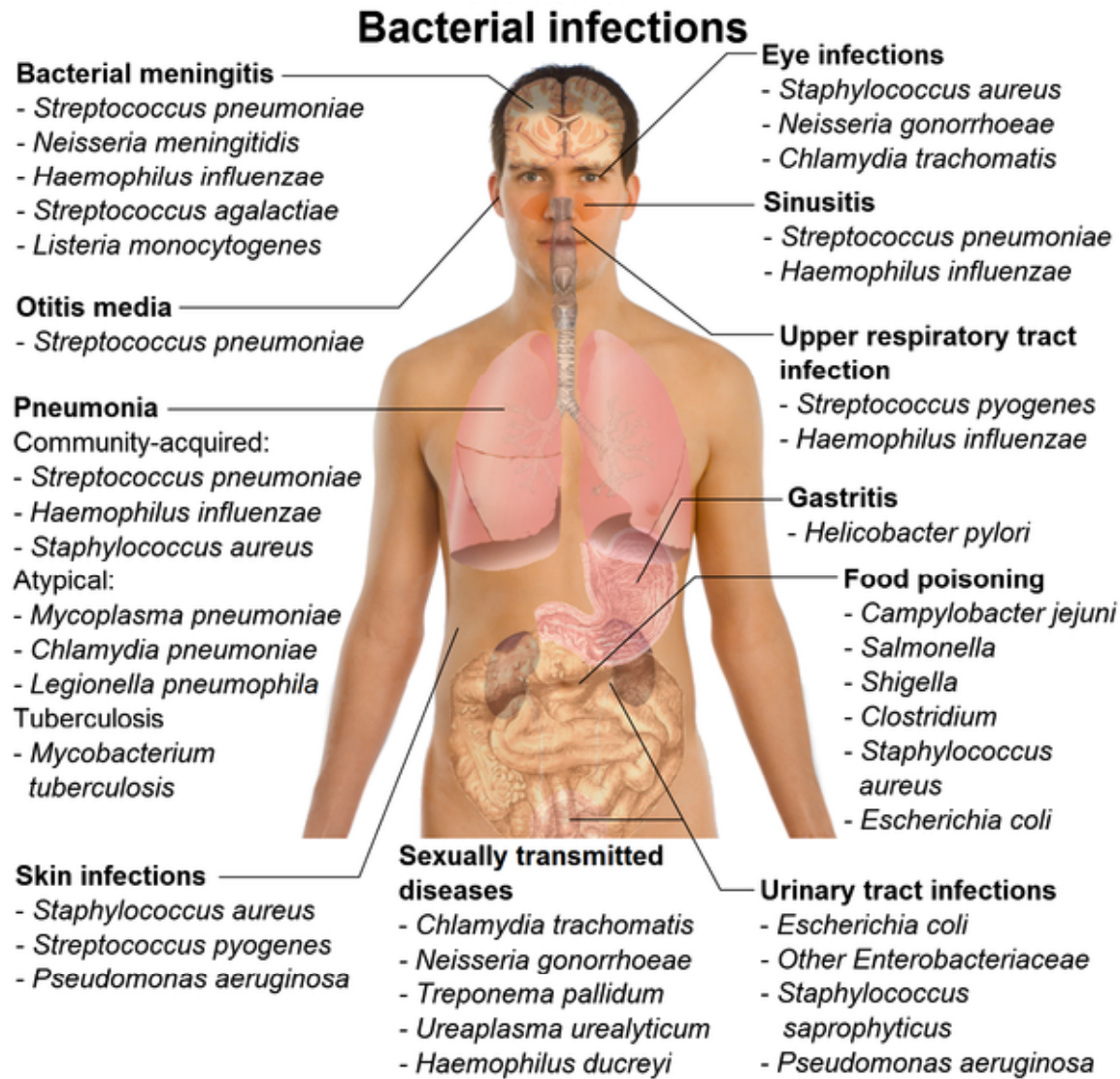
● Increase Productivity

- A med tech may increase output without a need to work more or longer days

● Decrease Costs

- Reagent costs per analyte is lower for multiplex vs. singleplex

Challenges in Microbiology



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