

ISBT  
CANCUN  
2012

32<sup>nd</sup> International Congress of the ISBT  
in joint cooperation with the 10th Congress of AMMTAC  
Cancun, Mexico, July 7 - 12, 2012



## ISBT WORKING PARTY ON RARE DONORS

### USA

American Rare Donor Program (ARDP)-

in 2011 - 82 members

51,576 rare donors in database

Shipped 2131 rare units; 16 international

Members maintain inventories; respond to requests

ISBT  
CANCUN  
2012

32<sup>nd</sup> International Congress of the ISBT  
in joint cooperation with the 10th Congress of AMMTAC  
Cancun, Mexico, July 7 - 12, 2012



## ISBT WORKING PARTY ON RARE DONORS

### USA

#### Rare criteria:

- Negative for high-incidence antigen (<1/1000)
- Negative for multiple common antigens
  - Set 1—R<sub>1</sub>, R<sub>2</sub>, R<sub>0</sub>, rr; K-; Fy(a-) or Fy(b-);  
Jk(a-) or Jk(b-), S- or s-
  - Set 2—R<sub>1</sub>, R<sub>2</sub>, rr; K-; Fy(a-b-)
- IgA deficient--<0.05mg/dL

ISBT  
CANCUN  
2012

32<sup>nd</sup> International Congress of the ISBT  
in joint cooperation with the 10th Congress of AMMTAC  
Cancun, Mexico, July 7 - 12, 2012



## ISBT WORKING PARTY ON RARE DONORS

### USA

#### Rare donor identification

- Members screen donors according to ethnicity, geographic location, etc---Tube, automation, molecular
- Antibody-positive donor on collection
- Antibody-positive patient; sibling testing

Shipping Outcome form--international shipments;  
developing form for national shipments

ISBT  
CANCUN  
2012

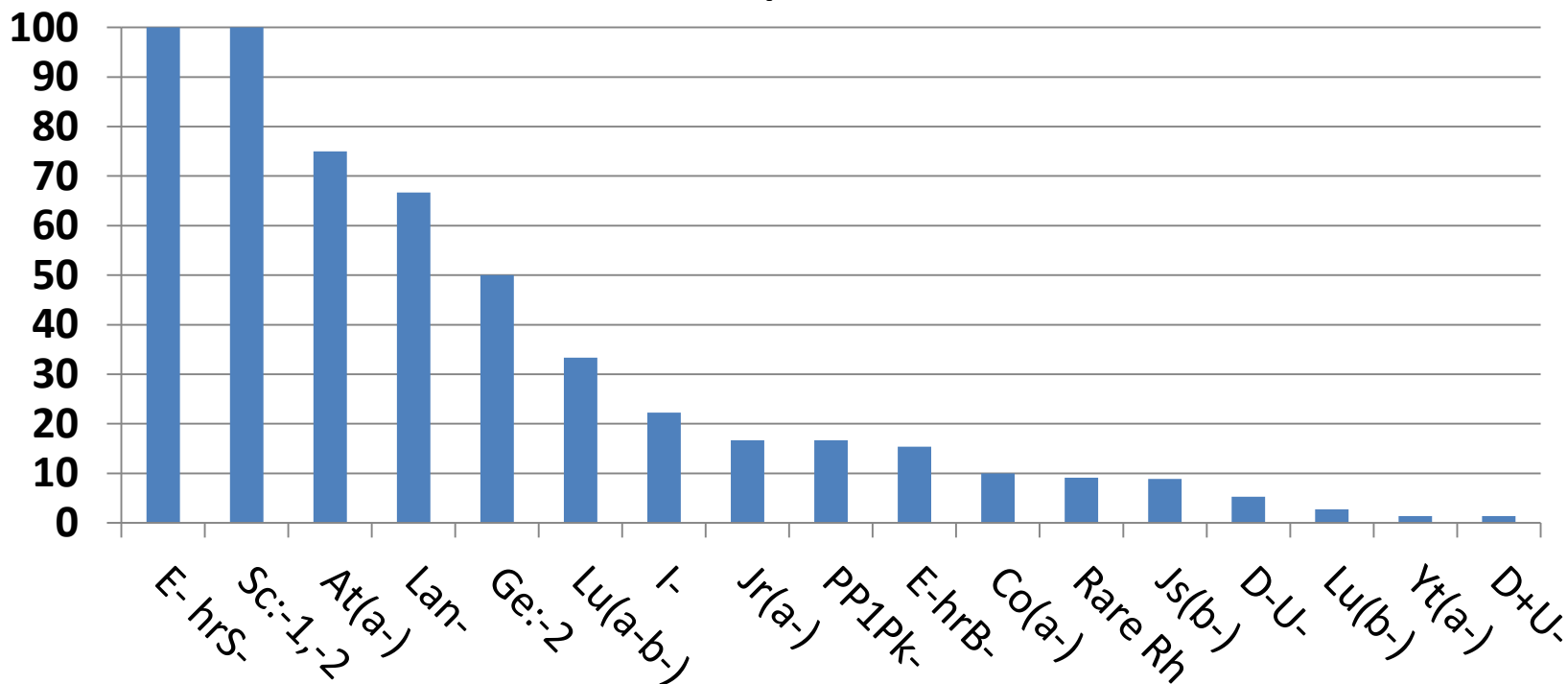
32<sup>nd</sup> International Congress of the ISBT  
in joint cooperation with the 10th Congress of AMMTAC  
Cancun, Mexico, July 7 - 12, 2012



## ISBT WORKING PARTY ON RARE DONORS

**USA**

% Unfilled Requests --2011



ISBT  
CANCUN  
2012

32<sup>nd</sup> International Congress of the ISBT  
in joint cooperation with the 10th Congress of AMMTAC  
Cancun, Mexico, July 7 - 12, 2012



## ISBT WORKING PARTY ON RARE DONORS

### USA

- Use of molecular testing
  - High-throughput platforms to screen donors –  
2011--screened 17,750 donors\*
  - Gene sequencing to characterize hr<sup>B-</sup>, hr<sup>S-</sup>, U-  
and U<sup>var+</sup> donors and patients
  - Molecular test results to ‘match’ donors with  
patients

\* Data courtesy of Margaret Keller, National Molecular Laboratory, American Red Cross

ISBT  
CANCUN  
2012

32<sup>nd</sup> International Congress of the ISBT  
in joint cooperation with the 10th Congress of AMMTAC  
Cancun, Mexico, July 7 - 12, 2012



## ISBT WORKING PARTY ON RARE DONORS

**USA**

Number of Rare Donors Found Through Screening by Molecular —2011\*

N = 17,750

Rare Phenotype	# Donors
possible hr <sup>B-</sup>	489
Jo(a-)	102
Js(b-)	59
S-s-U <sup>var+</sup>	49
S-s-U-	33
Jo(a-) Hy-	24
Lu(b-)	13
Co(a-)	3
Di(b-)	1

\* Data courtesy of Margaret Keller, National Molecular Laboratory, American Red Cross