



# **Logical Considerations as Part of the Dialogue Examining Anemia Management Strategies and Preserving Access to Transplantation**

**Bryan N. Becker, MD**

**Professor of Medicine**

**Executive Director of the University of Illinois Physicians Group Medical Service Plan**

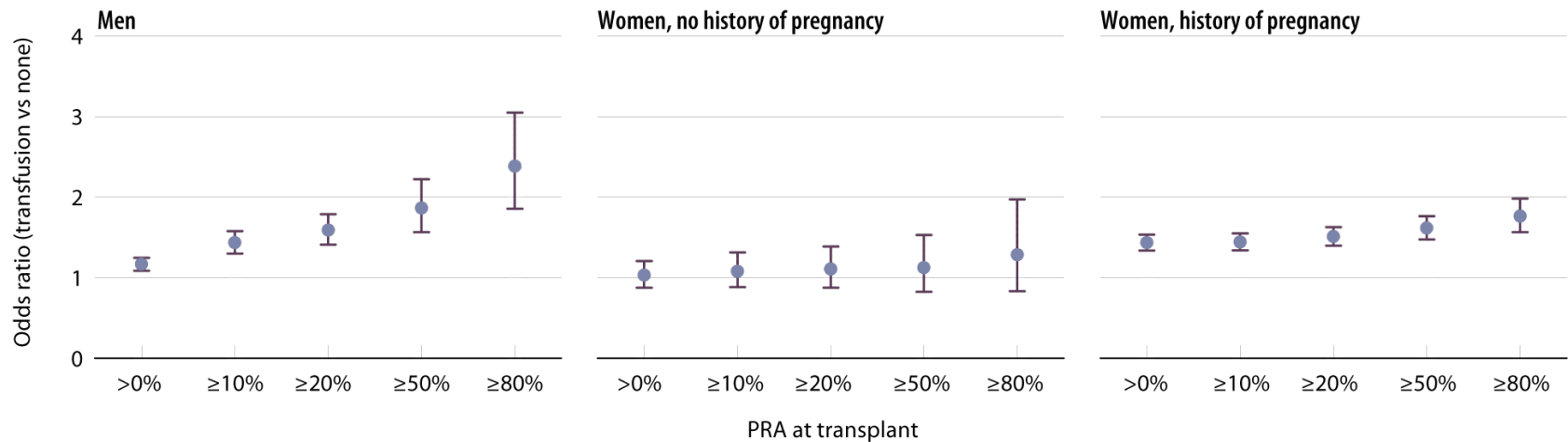
**Senior Associate Dean for Clinical Affairs, University of Illinois at Chicago**

**College of Medicine**

# Objective: Get to a successful kidney transplant

- Transplantation is the safest, most cost-effective treatment for kidney failure
- Clinician's goal: preserve access to transplantation for all patients
- Transfusion ↑ risk of developing PRA antibodies

# Effect of pre-Tx transfusion on risk of elevated PRA in Tx patients, by gender, 2004–2008; Figure 7.50 (Volume 2)



USRDS ADR

Patients age 18 & older receiving a first-time, kidney-only transplant recipients, 2004–2008.

Table 2. Transfusion-associated alloimmunization rates\*

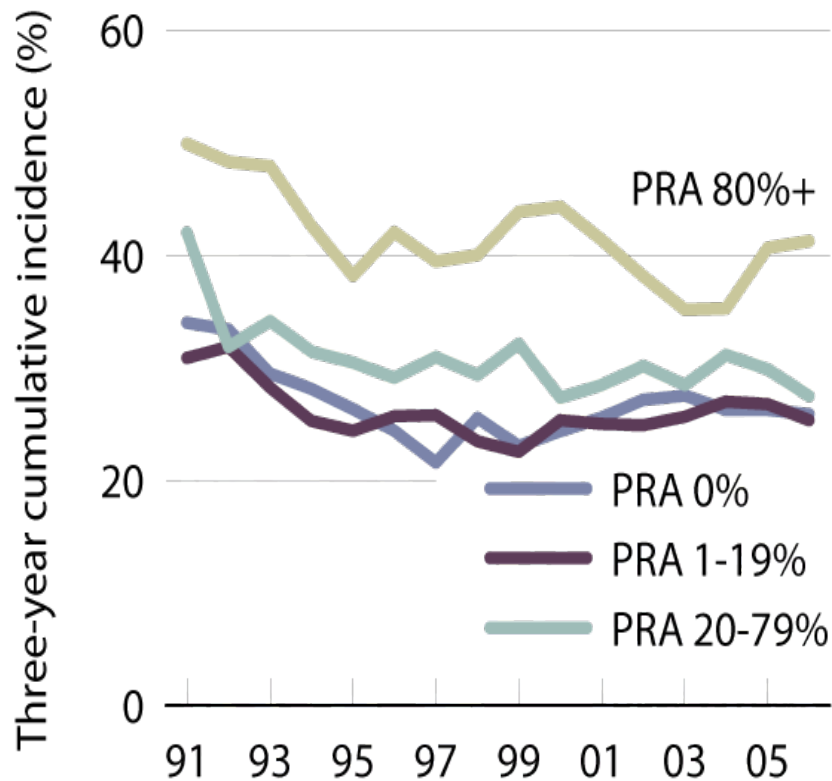
	Transfusion-Associated Alloimmunization		P
	Pre-leukoreduction	Leukoreduction	
All patients (n = 112)	16/60 (27%)	17/52 (33%)	NS
High risk (n = 52) (previous pregnancy, Tx, ≥5 tf)	12/23 (52%)	16/29 (55%)	NS
Low risk (n = 44) (no previous pregnancy, Tx, or tf)	3/31 (10%)	1/13 (8%)	NS

\*Tx, transplant; tf, transfusion.

Karpinski et al. JASN 2004

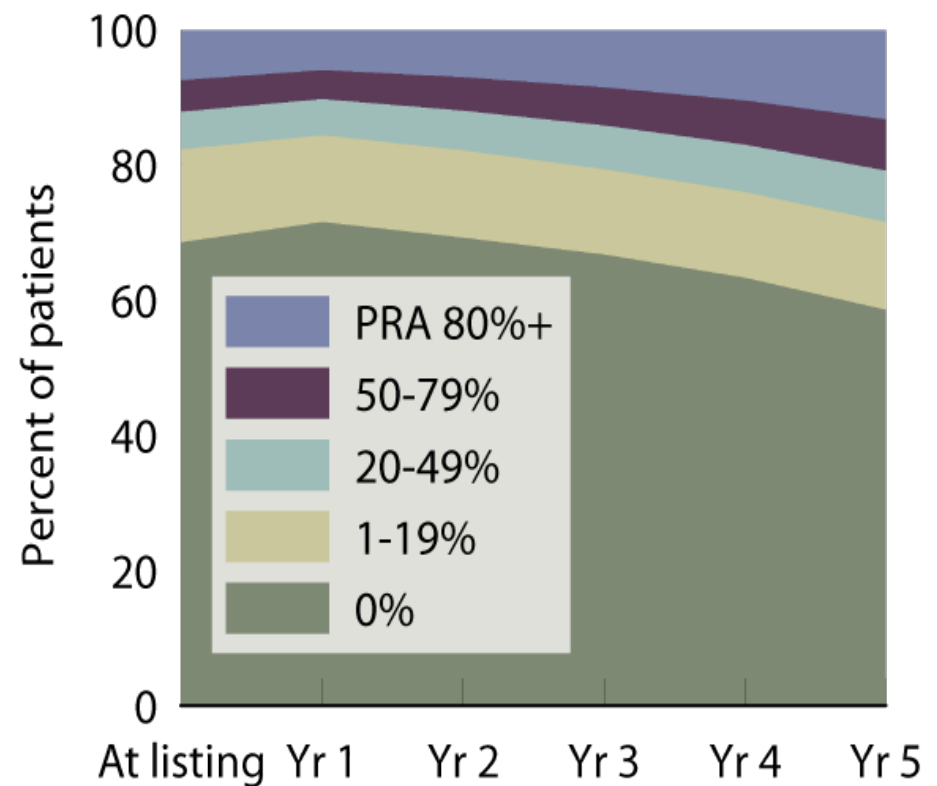
## 3-year cumulative incidence of transfusion in WL patients, by PRA

Figure 7.48 (Volume 2)



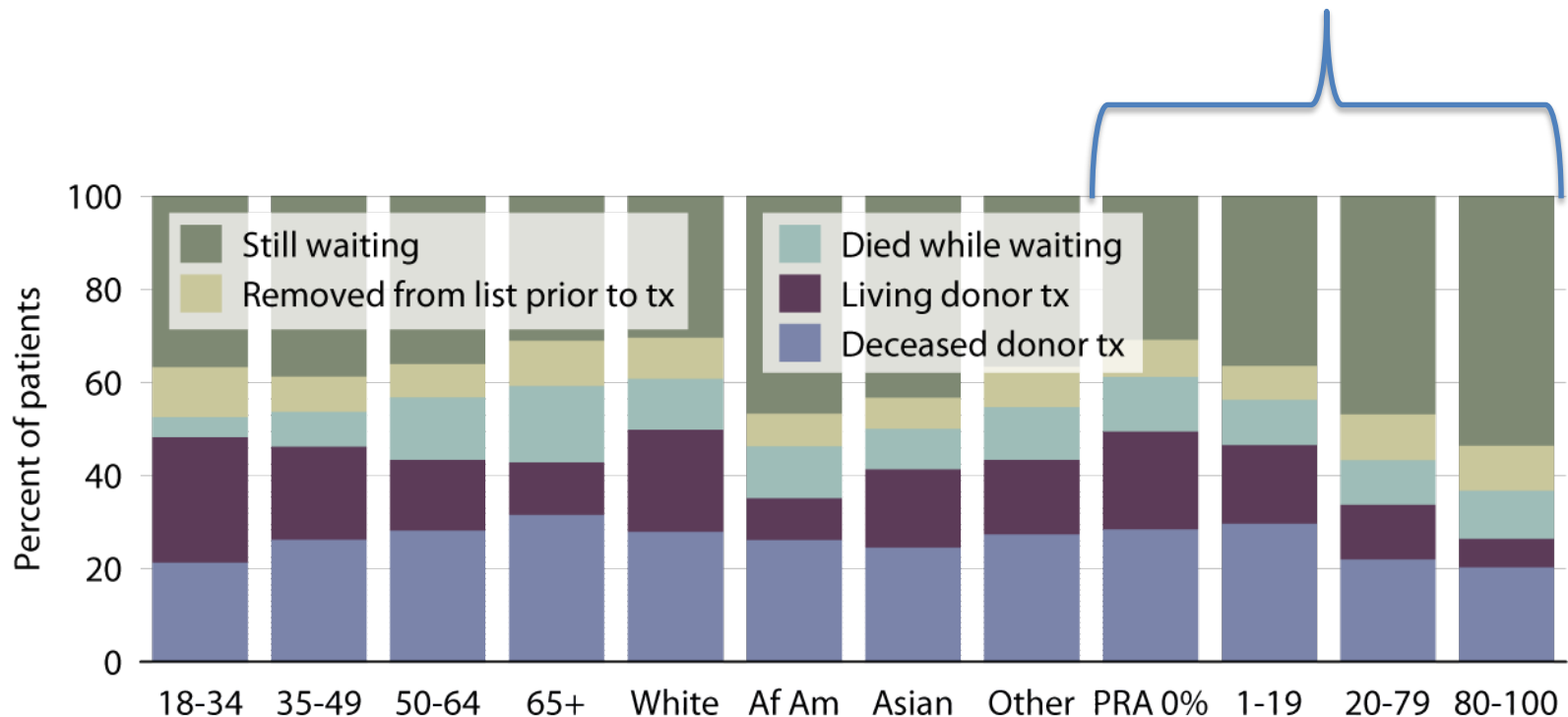
## Distribution of WL patients, by PRA & time after listing, 1998–2003

Figure 7.49 (Volume 2)



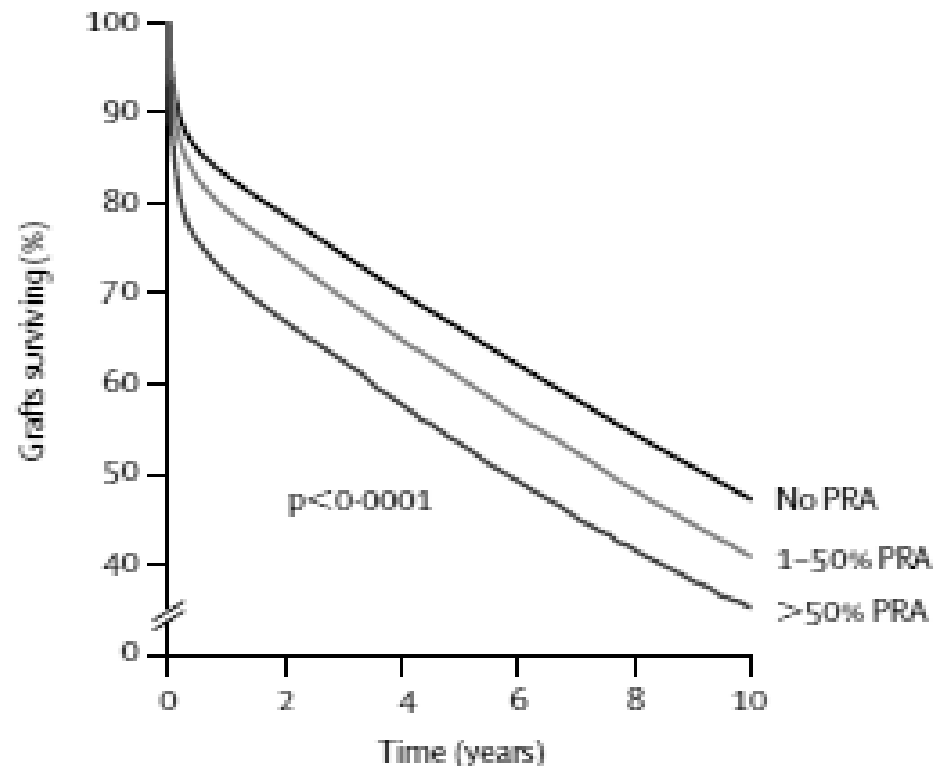
# Elevated PRA: increase wait times

Outcomes 1<sup>st</sup> time WL patients 3 years after listing, 2005,  
by age, race, & PRA, Figure 7.10 (Volume 2)



Pts age 18 & older listed for a first-time, kidney-only transplant in 2005; transplanted patients may have subsequent outcomes in the three-year follow-up period.

# Elevated PRA: decreased graft survival



Number of  
transplants

No PRA	116562	83720	62516	44887	30819	20674
1-50% PRA	36314	25005	18402	12842	8590	5586
>50% PRA	7610	4712	3582	2579	1817	1242

- “I will prescribe regimens for the good of my patients according to my ability and my judgment and never do harm to anyone.”

Transfusion is an avoidable risk