Asian Society of Gynecologic Oncology

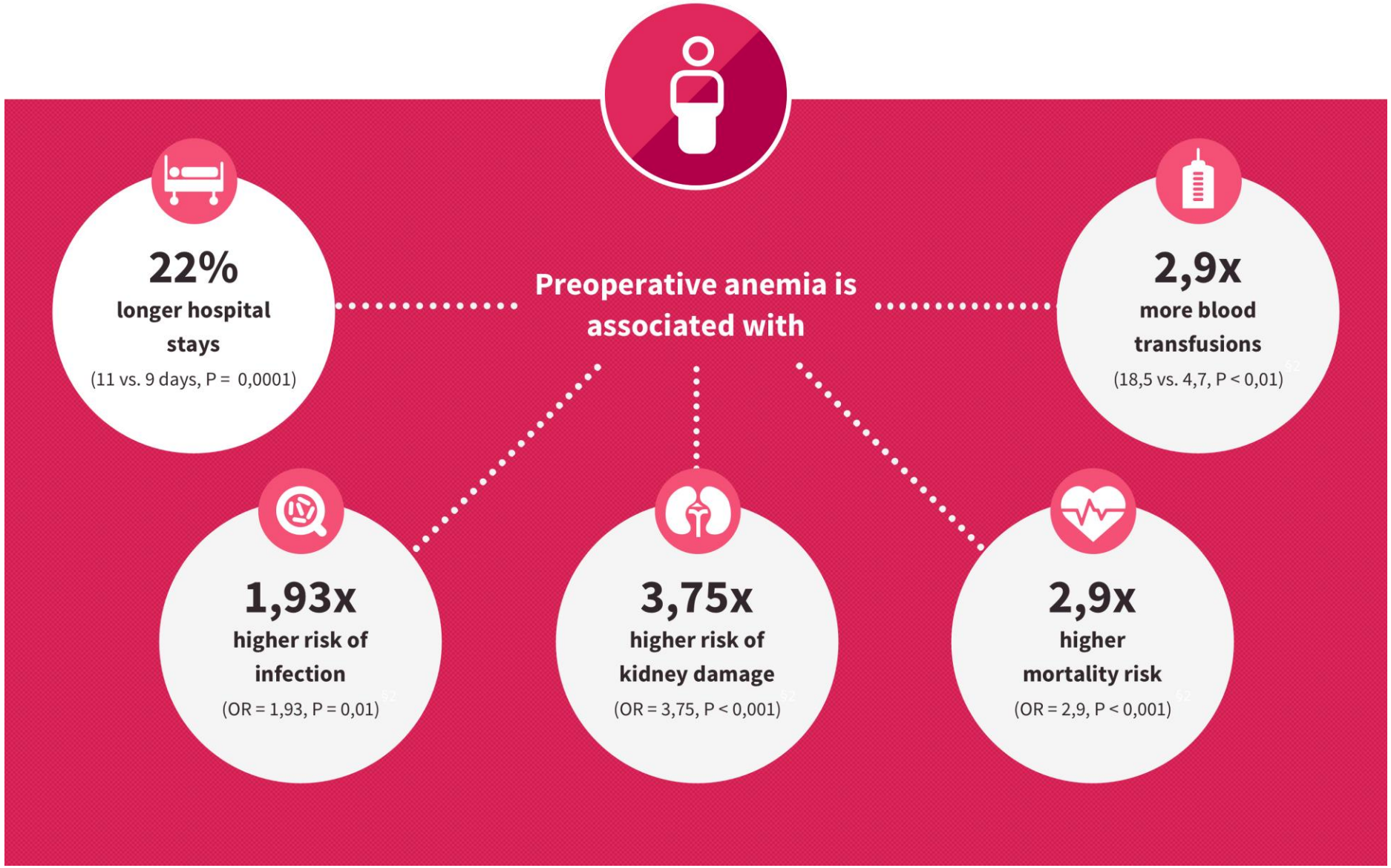
# Patient Blood Management in Gynecologic Oncology

## ASGO Webinar Series # 36 Discussion

Jie Yang MD

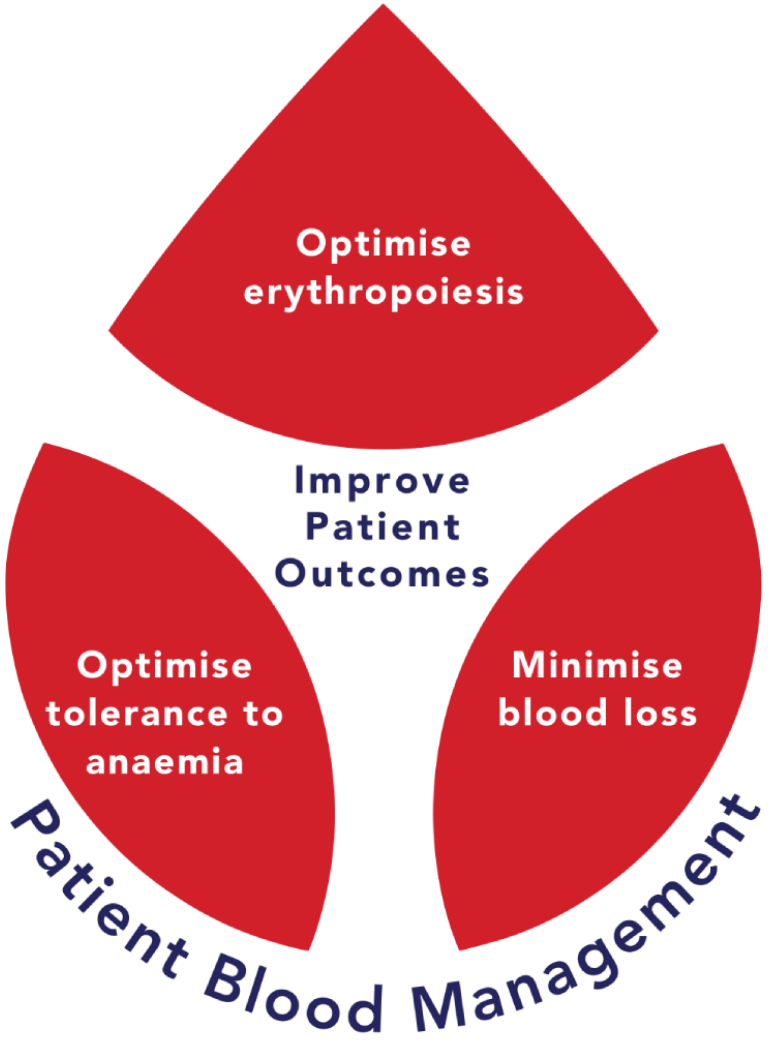
Peking Union Medical College Hospital

05/26/2023

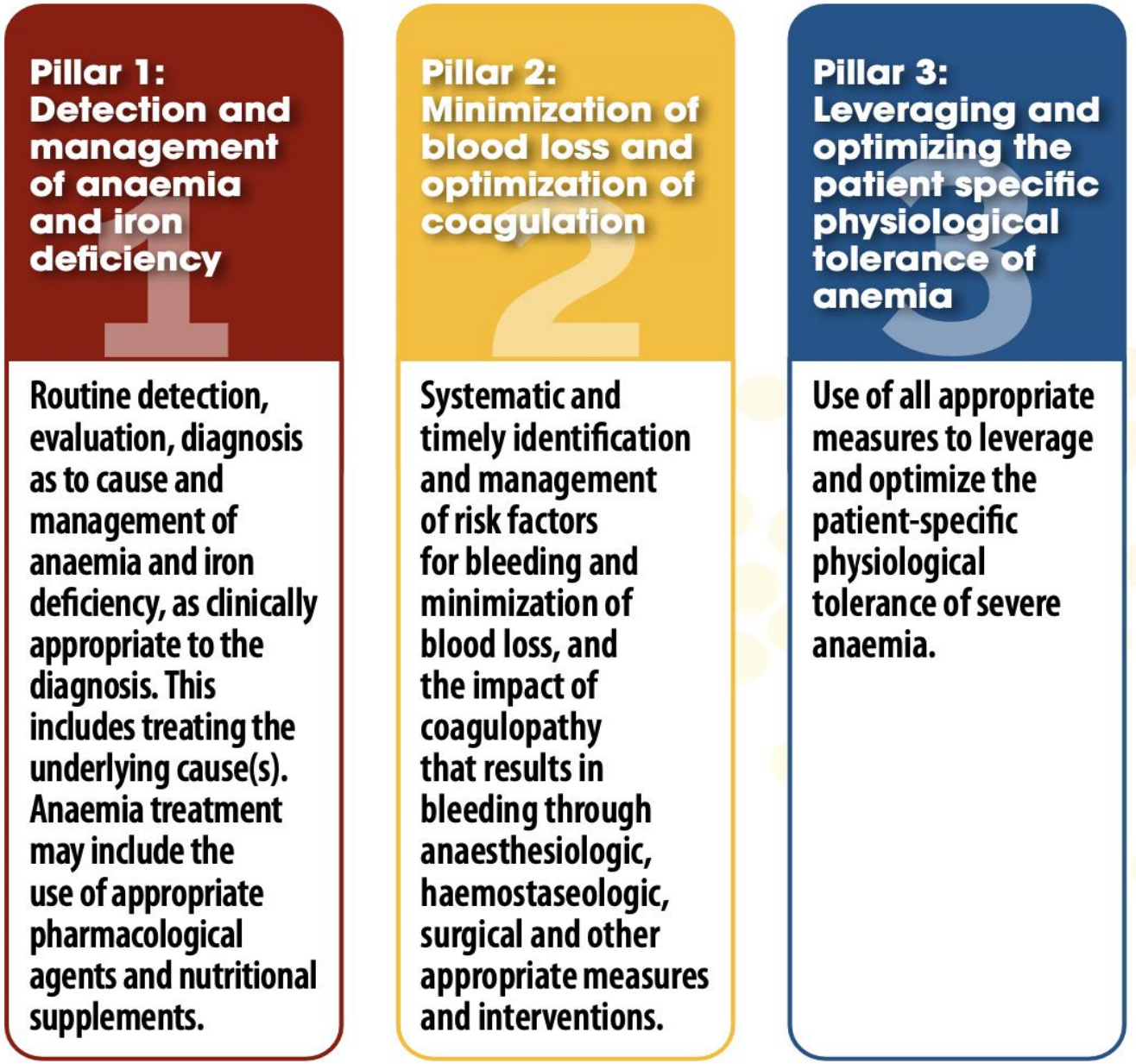

Preoperative anemia is associated with
22%
longer hospital stays
(11 vs. 9 days, P = 0,0001)
2,9x
more blood transfusions
(18,5 vs. 4,7, P < 0,01)
1,93x
higher risk of infection
(OR = 1,93, P = 0,01)
3,75x
higher risk of kidney damage
(OR = 3,75, P < 0,001)
2,9x
higher mortality risk
(OR = 2,9, P < 0,001)

# PBM is an evolving standard

- PBM was originally developed to improve outcomes of surgical patients.
- Large scale PBM including surgical and non-surgical patients was implemented since 2010s



# WHO three pillars of PBM



# Five Things Physicians and Patients Should Question

Choosing Wisely®

*An initiative of the ABIM Foundation*

American Association Of Blood Bank

## 1 Don't transfuse more units of blood than absolutely necessary.

Each unit of blood carries risks. A restrictive threshold (7.0-8.0g/dL) should be used for the vast majority of hospitalized, stable patients without evidence of inadequate tissue oxygenation (evidence supports a threshold of 8.0g/dL in patients with pre-existing cardiovascular disease). Transfusion decisions should be influenced by symptoms and hemoglobin concentration. Single unit red cell transfusions should be the standard for non-bleeding, hospitalized patients. Additional units should only be prescribed after re-assessment of the patient and their hemoglobin value.

## 2 Don't transfuse red blood cells for iron deficiency without hemodynamic instability.

Blood transfusion has become a routine medical response despite cheaper and safer alternatives in some settings. Pre-operative patients with iron deficiency and patients with chronic iron deficiency without hemodynamic instability (even with low hemoglobin levels) should be given oral and/or intravenous iron.

## 3 Don't routinely use blood products to reverse warfarin.

Patients requiring reversal of warfarin can often be reversed with vitamin K alone. Prothrombin complex concentrates or plasma should only be used for patients with serious bleeding or requiring emergency surgery.

## 4 Don't perform serial blood counts on clinically stable patients.

Transfusion of red blood cells or platelets should be based on the first laboratory value of the day unless the patient is bleeding or otherwise unstable. Multiple blood draws to recheck whether a patient's parameter has fallen below the transfusion threshold (or unnecessary blood draws for other laboratory tests) can lead to excessive phlebotomy and unnecessary transfusions.

## 5 Don't transfuse O negative blood except to O negative patients and in emergencies for women of child bearing potential with unknown blood group.

O negative blood units are in chronic short supply due in part to overutilization for patients who are not O negative. O negative red blood cells should be restricted to: (1) O negative patients; or (2) women of childbearing potential with unknown blood group who require emergency transfusion before blood group testing can be performed.

# Gynecologic Oncology Practice - Surgery

- Pre-surgical EPO? Cancer risk?

HEMATOL TRANSFUS CELL THER. 2022;44(1):76–84

Review article

**Role of preoperative erythropoietin in the optimization of preoperative anemia among surgical patients — A systematic review and meta-analysis**

**Management of Cancer-Associated Anemia With Erythropoiesis-Stimulating Agents: ASCO/ASH Clinical Practice Guideline Update**

"The general indication for erythropoiesis-stimulating agents in cancer is to reduce transfusions because the risks may outweigh the benefits, except for those patients with myelodysplastic syndromes," Dr. Lazo-Langner said.

- Intra-operative bleeding (eg: uterine sarcoma): Blood transfusion principle and strategy?
- Autologous blood transfusion?
  - -Predeposit autologous donation (PAD) vs Intraoperative cell salvage (ICS)
  - -may increase the risk of unnecessary transfusion

# Gynecologic Oncology Practice – CT/RT

- Chemotherapy/Radiation therapy
  - About 70%-90% patients had anemia during CT (platinum)
  - 50% received transfusion
- Adequate RBC to ensure the optimal oxygenation during RT
- Goal?

Practice Guideline > J Clin Oncol. 2019 May 20;37(15):1336-1351. doi: 10.1200/JCO.18.02142. Epub 2019 Apr 10.

**Management of Cancer–Associated Anemia With Erythropoiesis–Stimulating Agents: ASCO/ASH Clinical Practice Guideline Update**

10g/dL

JAMA Network Open

Original Investigation | Oncology

**Red Blood Cell Transfusion Practices for Patients With Cervical Cancer Undergoing Radiotherapy**

9g/dL

The patient's clinical status should be of utmost consideration.


Thank you and see you next ASGO webinar!