

Can we speed approval of devices with less pre-market data but with enriched post-market data and what is adjudication's role?



# That Depends...



### What does Adjudication do well?

- Relatedness to device/procedure
- Determination of AE occurrence with complex definitions
  - AKI, Vascular injury, bleeding
- Classification of Major endpoints
  - Death CV death
  - Rehosp complications or CV
- Success of composite endpoints
- composite of multiple data sources
- Are determined through duration
- Interpretable data
- Imaging, Echo, CT

#### And not so well?

- Subjective descriptions of AE
  - 1 L of CT output serous or blood with clots
- How well did the device perform
  - Are there usability issues
- Patient Centric endpoints
  - Satisfaction with outcome
  - Quality of life after procedure
- Adjudication may not impact outcomes
- Heavy use of resources
  - Pogue et.al.

# Adjudication is not a panacea to quality data



# **Adjudication**

May be currently seen as a panacea to quality data collection and does increase specificity of analyses but sensitivity is less than ideal

#### WHY

- Accurate data collection begins with the site and the investigator
- Ascertainment bias
- Adjudication can find unidentified events when <u>chartered</u> to look source documents
- Charters are the CEC drivers and take precedence over the protocol
- Analyses run into problems later when charters and protocols or SAP not aligned

# Adjudication requires Quality Assurance review



## Quality

In reviewing data, there is a realization of degree of human error and subjective interpretation that is inherent in device trials that produces data that is the best approximation of safety and effectiveness in regulatory submissions

#### **WHAT**

- Quality assurance review by the adjudicating body
  - Reviewer reliability, learning over time, number of disagreements
- QA program by the sponsor to detect problems
  - are the charter definitions being interpreted as intended
  - Reproducibility of adjudication
  - Site quality issues with device performance

# Trials can be shortened with enriched adjudicated data long term



#### **Enriched data**

Can we turn 2 year trials into 1 year, and can we turn 1 year trials into 30 day studies by providing longer term enriched quality data?

#### HOW? MORE FOCUSED USE OF ADJUDICATION

- Adjudication of selective endpoints that answer remaining questions from a shorter trial
- Focused use of resources for producing quality data from sites
- Requires long term commitment and support
  - i.e. echo lost to follow up
  - use resources to get local imaging centers of excellence that all studies can use
- Pre and Post market balance also have to balance cost and sites resources

# **Closing remarks**



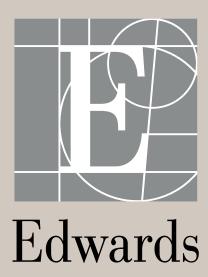
# **Challenges**

We here today, Industry, Academia and Industry, are brought together by our desire to bring life saving and transformative technology quickly and safely to patients lives

Whether it's the EAP or other pathways through the PMA to market

There is a call to action to define best practices for adjudication so that

Industry, investigators and regulators have a blueprint to build efficient and less burdensome trials



# Presentation title is Arial Bold 28pt on up to four lines

Presenter's Name Month 00, 0000

#### **READ & DELETE BEFORE USING**

Background rectangle may be any of the 50% or 25% tints shown on the "Our color palette" slide in this deck.

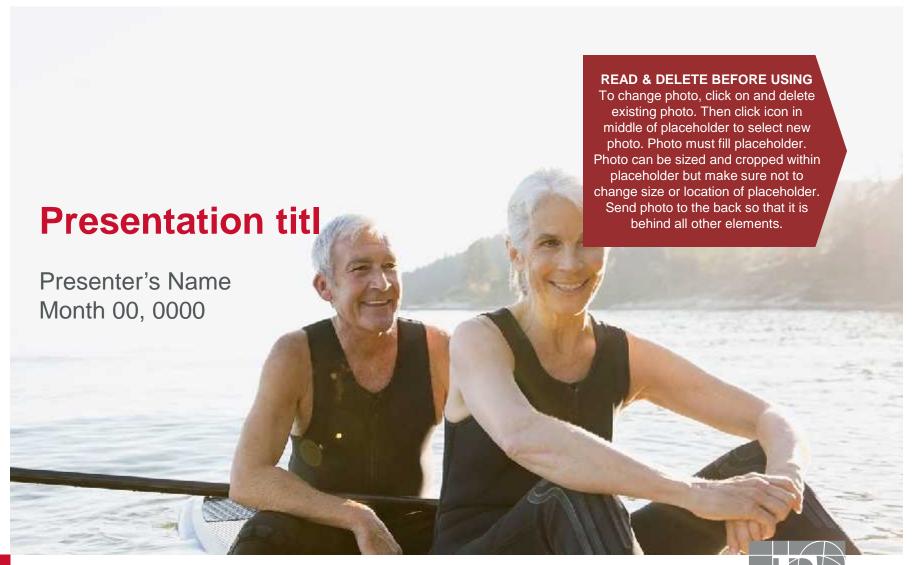
#### BLEEDING DEFINITIONS

3	GUSTO	TIMI	TIMI	18
	severe	major	minor	m
Fatal	+	+		
Intra cranial	+	+		
Critical organ				
Non-overt (Hb))			> 4	
Overt (Hb) mg%	6)	> 5	> 3	2
With intervention +*		Transfusion:		
	+* hemo	dynan	nic com	nro
		Wall		piu

# **Presentation title**

Presenter's Name Month 00, 0000







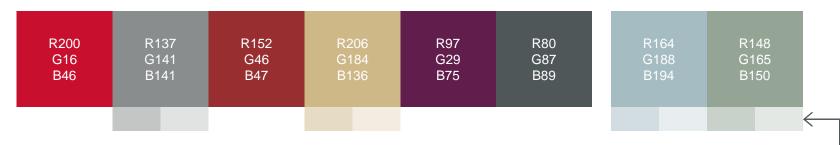
# Use this alternate title slide for presentations with really long titles

Presenter's Name Month 00, 0000

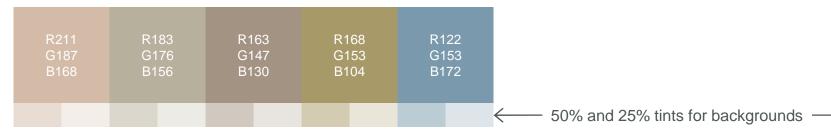


## Our color palette

Our "look" is red and titanium gray. For charts and graphics, though, these eight colors are built into the PowerPoint color palette\*. The first six are "accent" colors that PowerPoint will automatically use in charts and graphics (see examples on following slides). The last two can be selected from the palette, if needed.



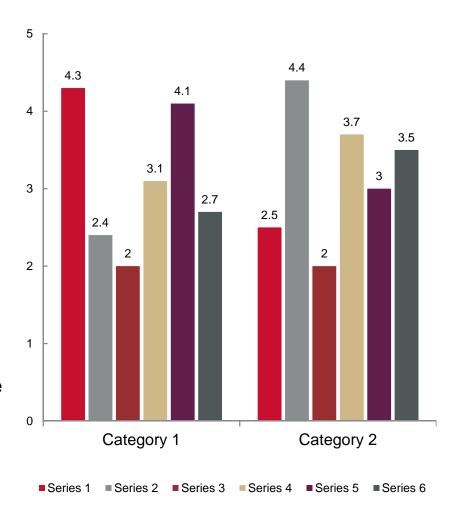
These additional neutral colors can be manually applied, if needed:



<sup>\*</sup>The RGB color formulas in this template have been specially adjusted for PowerPoint.

# This is a "Two Content" slide — two columns that can be used for text, charts, images or graphics

- "Two Content" slides have two equalwidth columns, each of which can be used for text, charts, images or graphics.
- As with one-column slides, level one text can be used with or without a bullet.
- Text sizes and levels are the same as one-column slides.
- When there is too much text in a column, it automatically shrinks to fit—but avoid jamming slides full of text.
- The six accent colors in the built-in color palette are automatically used in charts.
   Override colors as needed, but always use approved colors from our color palette.



# Section header title is Arial Bold 28pt

Subtitle, if needed



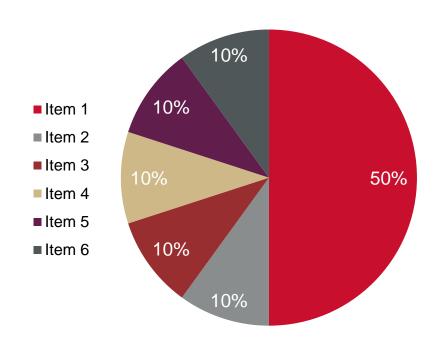
## This is a "Comparison" slide — two columns with titles

# Column title is Arial Bold 16pt on one or two lines

As with one-column slides, level one text can be used with or without a bullet.

- The six colors in the chart on the right are automatically applied by PowerPoint.
   They can be overridden if needed.
- Always use approved colors.
- Keep charts and graphics simple.
- Avoid distracting effects.

#### **Column title is Arial Bold 16pt**



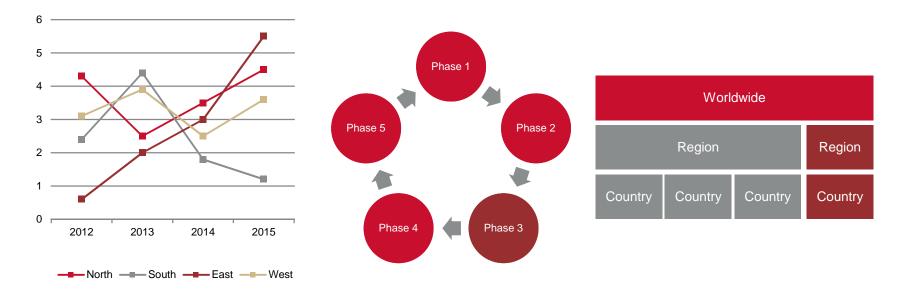
### **Tables**

The built-in "Edwards" table style can be used to create tables. The table below has the "Header Row", "Total Row" and "Banded Rows" options turned on. Turning all options off creates a simple table with horizontal rules.

Table header is Arial Bold 12pt				
Row 1	123	456	789	
Row 2	456	789	123	
Row 3	789	123	456	
Total	123	456	789	

## **Charts and graphics**

Whether using charts, SmartArt or creating your own graphics, always use the approved color palette and keep graphics simple. Avoid rounded corners on square and rectangular shapes. Avoid distracting effects — if drop shadows are used, they should be subtle.



# Thank you

Required statements and disclosures go here.

- 1. Use the "Increase Indent" button to access other levels such as numbered paragraphs and bullets.
- 2. Update code number (below) as appropriate.
- 3. The address text (below) is on the master slide.

Edwards, Edwards Lifesciences and the stylized E logo are trademarks of Edwards Lifesciences Corporation or its affiliates. All other trademarks are the property of their respective owners.

© 2016 Edwards Lifesciences Corporation. All rights reserved. PP--US-XXXX

Edwards Lifesciences • One Edwards Way, Irvine CA 92614 USA • edwards.com



Required statements and disclosures go here.

- 1. Use the "Increase Indent" button to access other levels such as numbered paragraphs and bullets.
- 2. Update code number (below) as appropriate.
- 3. The address text (below) is on the master slide.

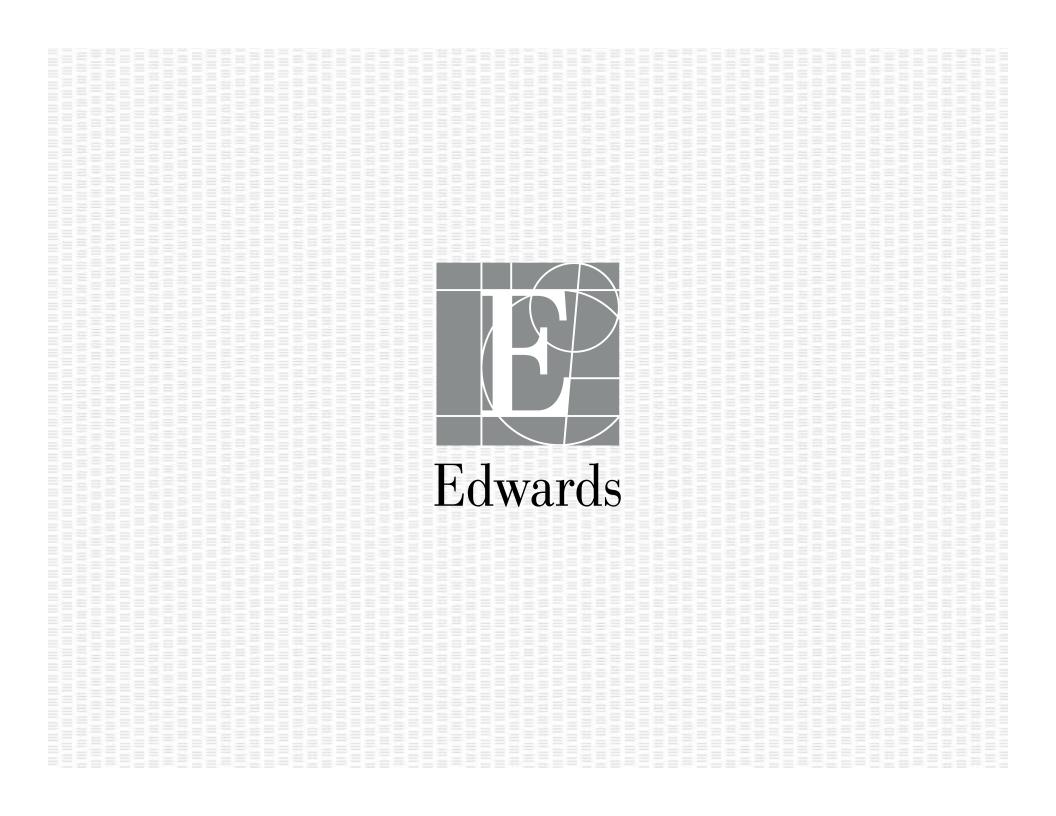
Edwards, Edwards Lifesciences and the stylized E logo are trademarks of Edwards Lifesciences Corporation or its affiliates. All other trademarks are the property of their respective owners.

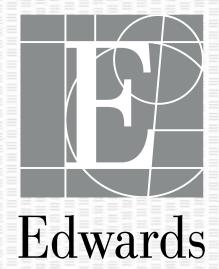
© 2016 Edwards Lifesciences Corporation. All rights reserved. PP--US-XXXX

Edwards Lifesciences • One Edwards Way, Irvine CA 92614 USA • edwards.com

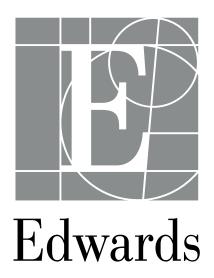


Edwards





Helping Patients is Our Life's Work, and life is now



Helping Patients is Our Life's Work, and life is now