LA SINDROME CORONARICA ACUTA IERI E OGGI

Giovanni B. Pedrazzini

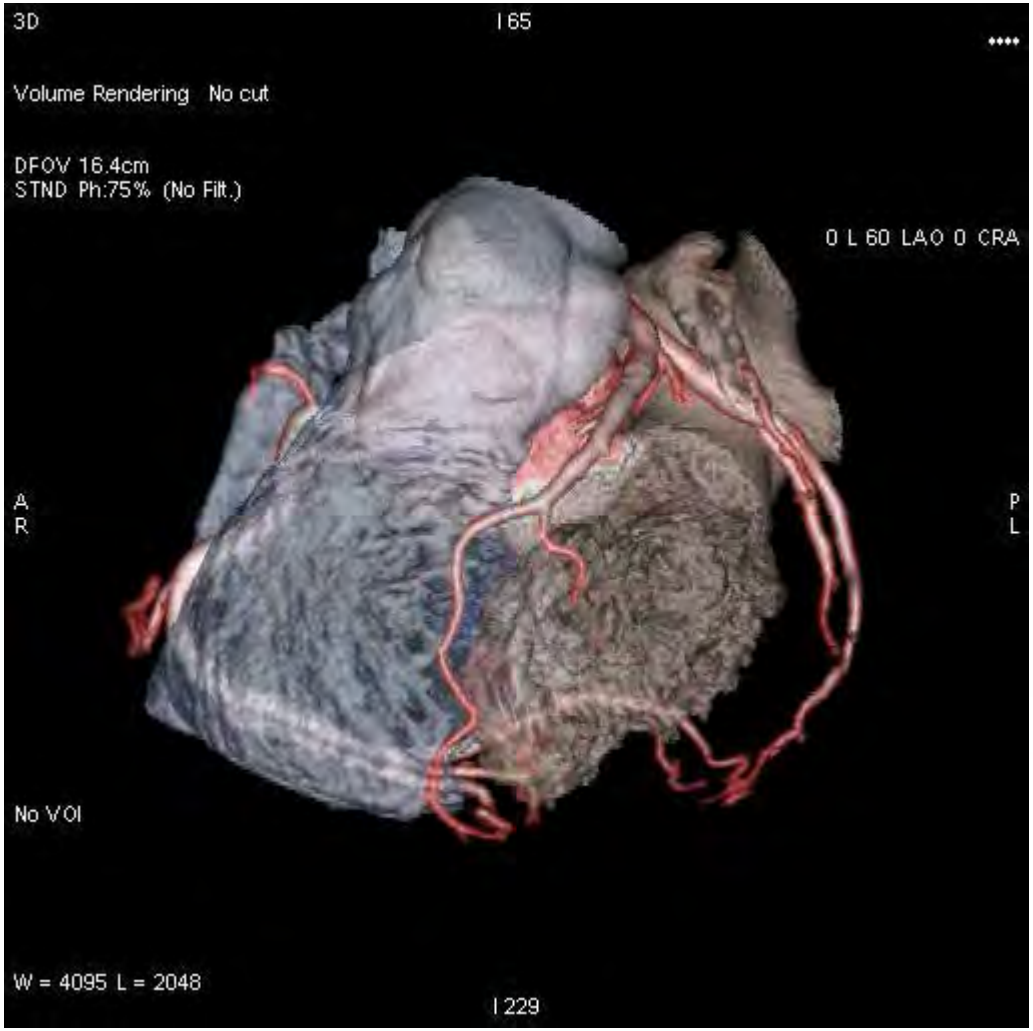
Lugano 24.11.2017

Associated Institute of the University of Zurich

University of Zurich[UZH]

CARDIOCENTROTICINO

Arterie coronarie



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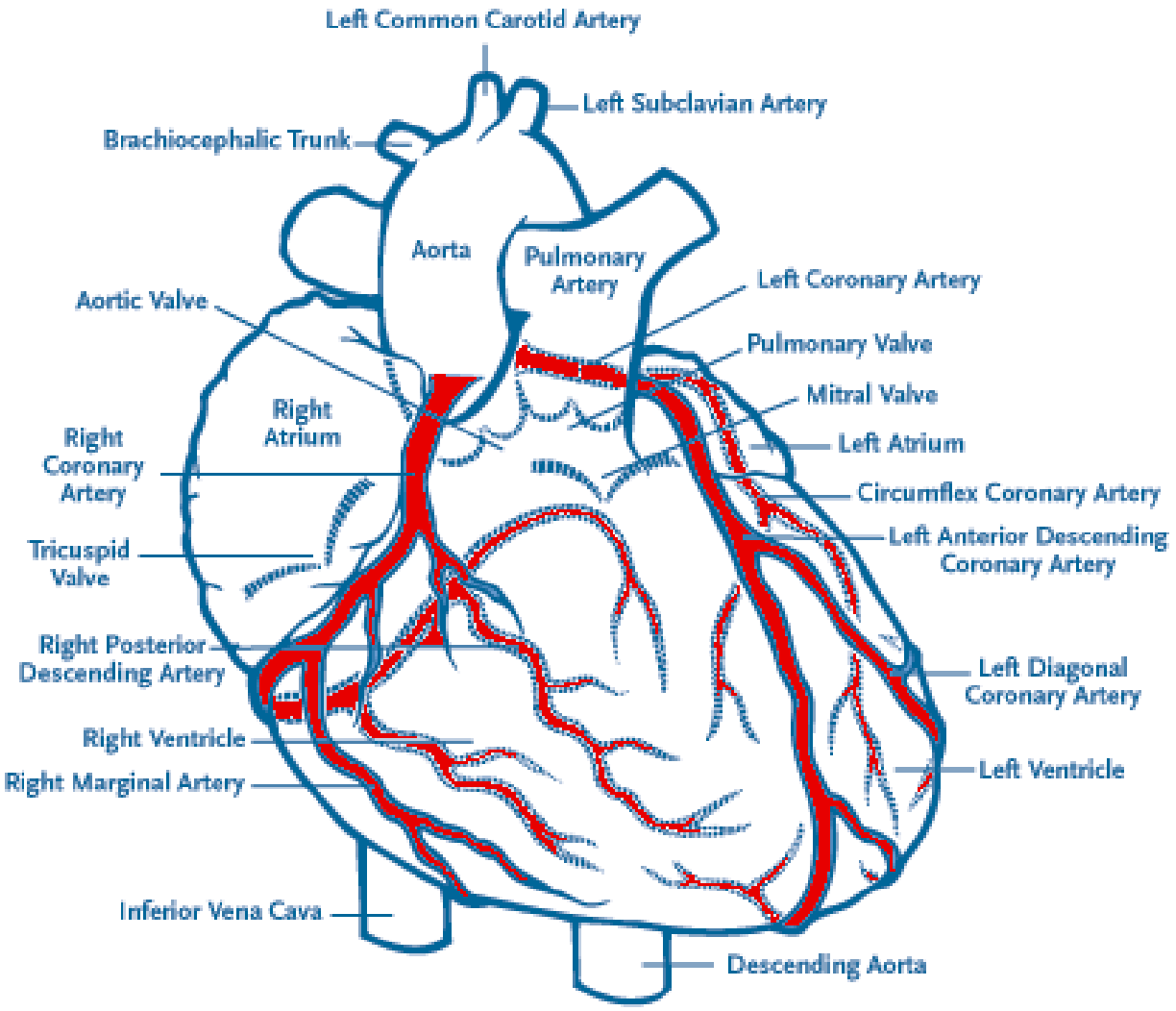
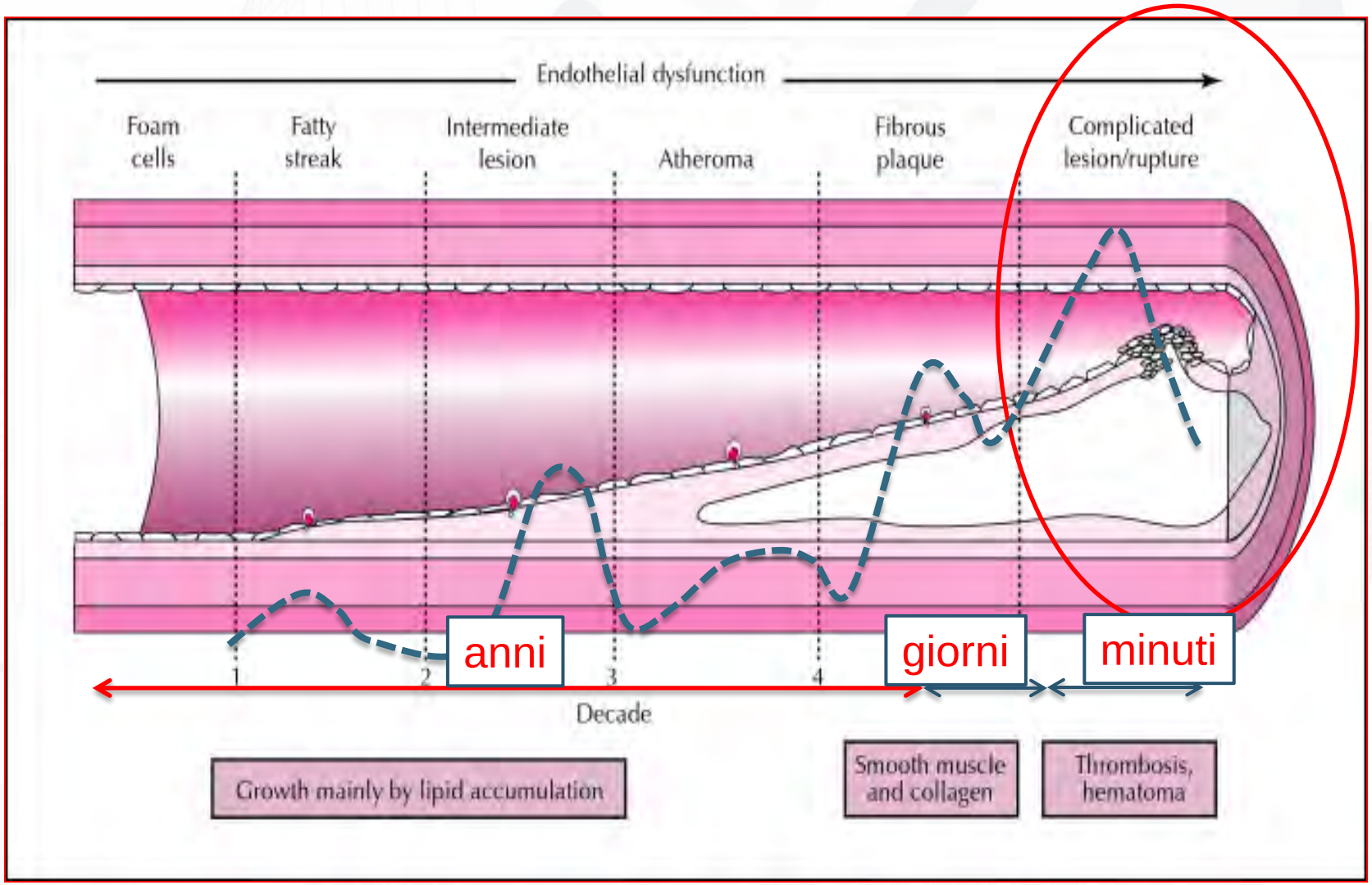
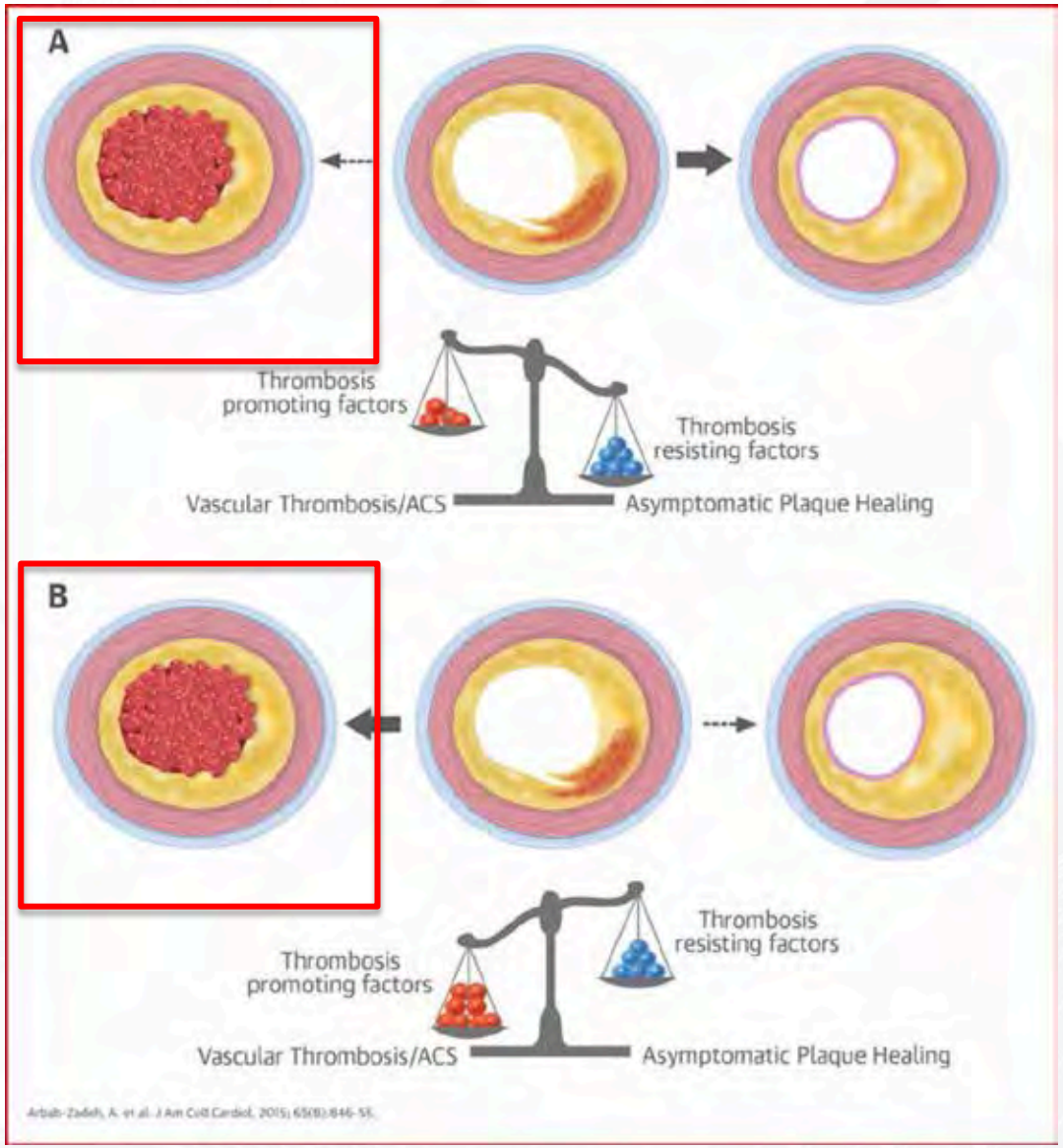


How the coronary plaque evolves

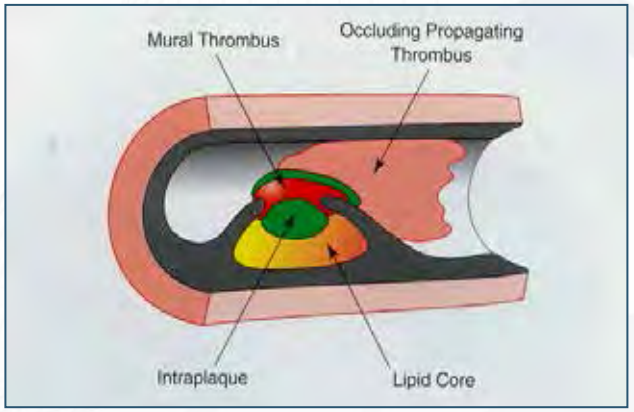


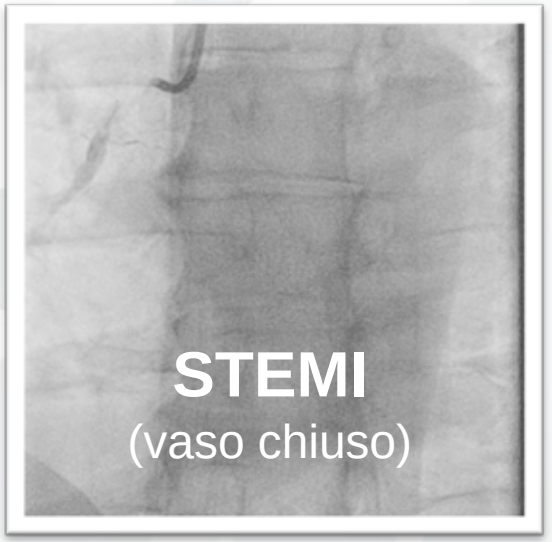
La placca coronarica



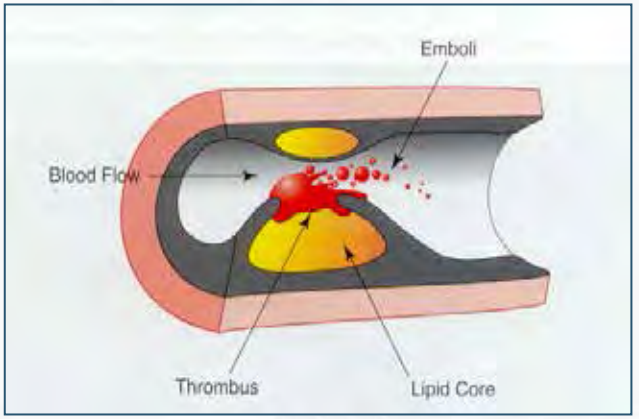
La sindrome coronarica acuta

STEMI
ST elevation myocardial infarction



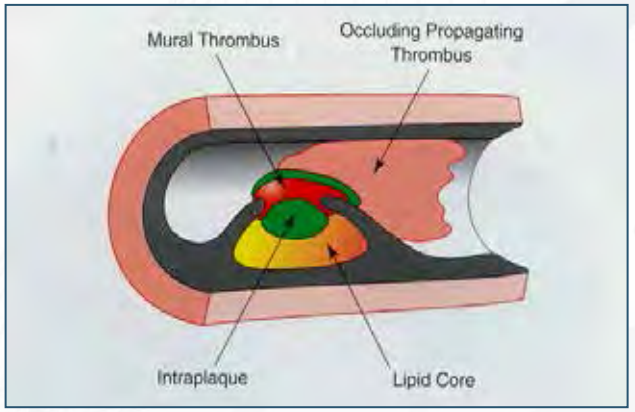


NSTEMI
Non ST elevation myocardial infarction

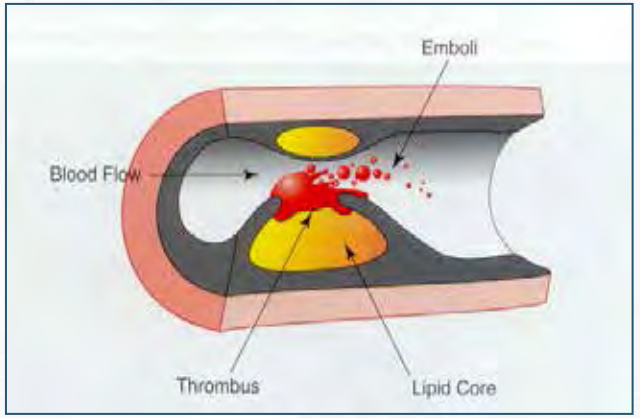


La sindrome coronarica acuta

STEMI
ST elevation myocardial infarction

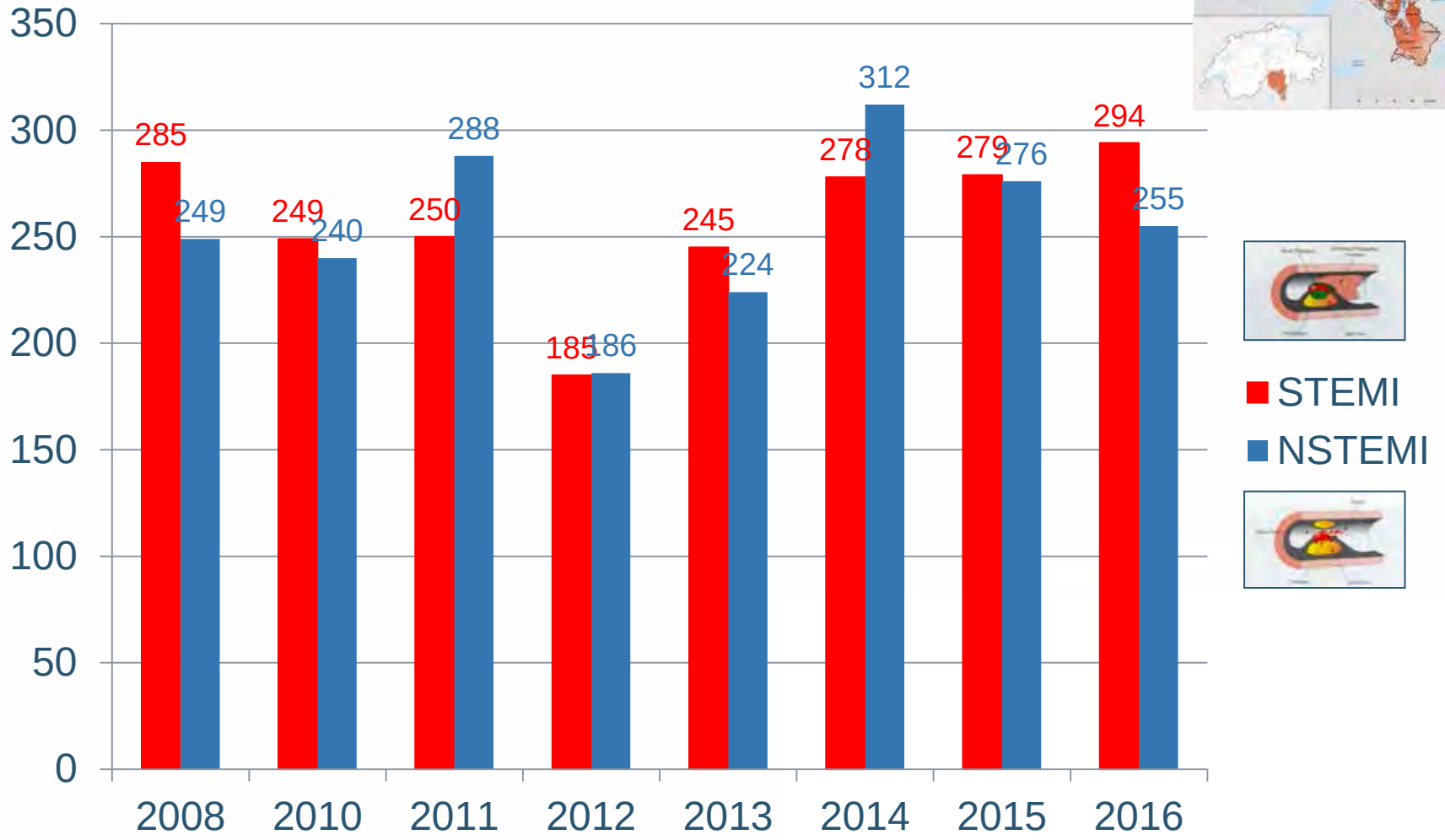


NSTEMI
Non ST elevation myocardial infarction

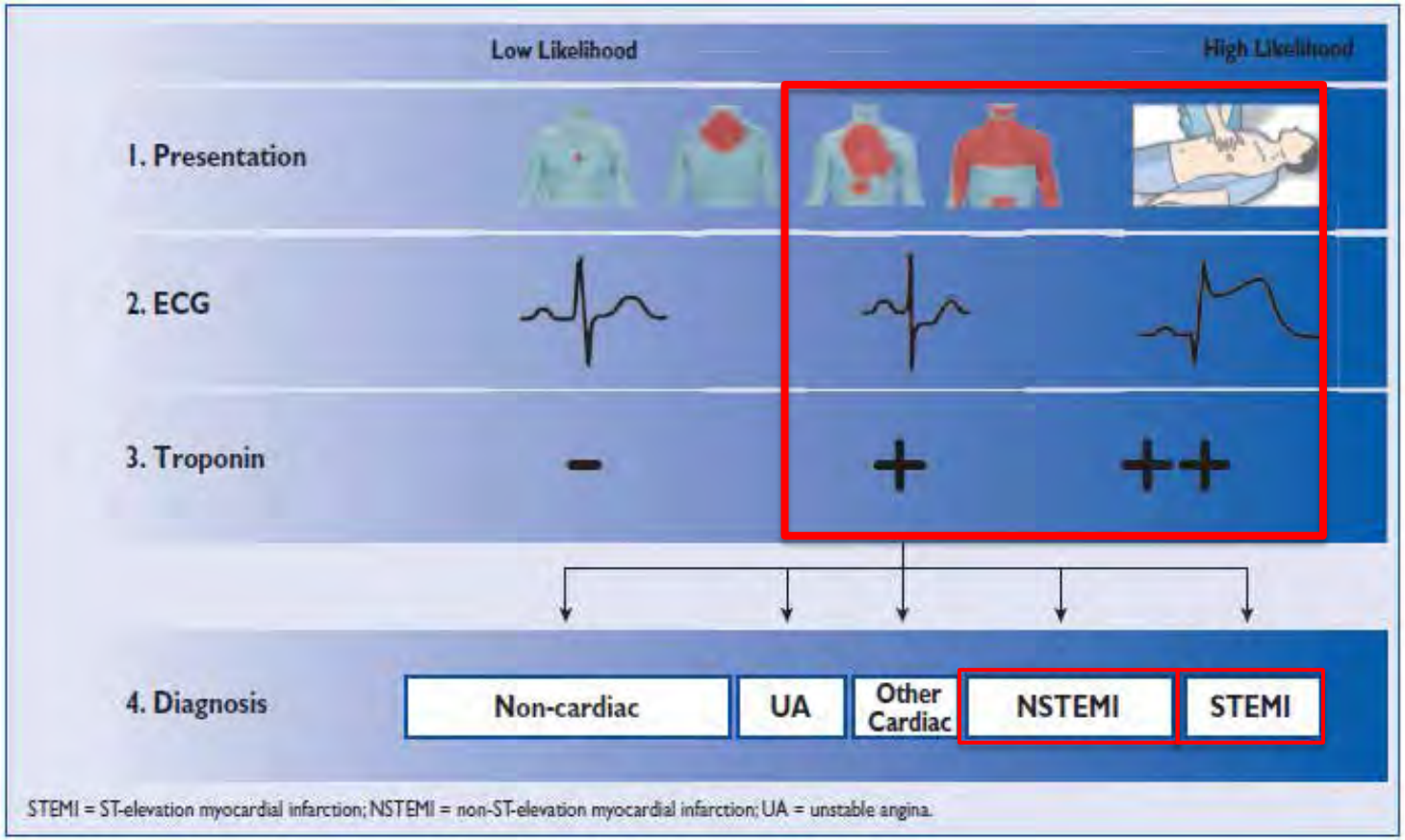


- Incidenza: 300/100.000 abitanti (aumenta con l'età)
- Mortalità ospedaliera 7%
- Mortalità a 6 mesi 12-14%

CARDIOCENTROTICINO



Criteri diagnostici



La sindrome coronarica acuta

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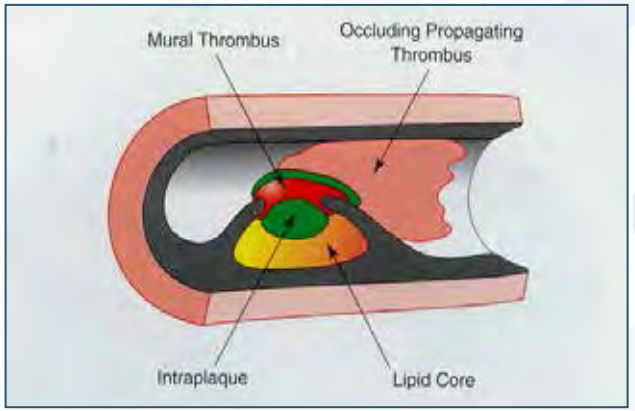

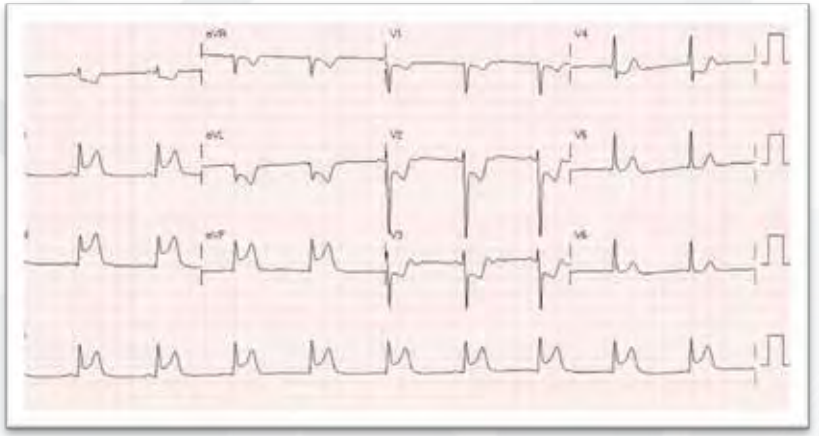

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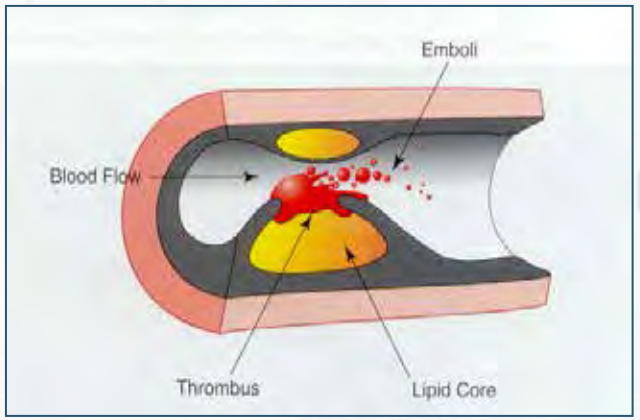
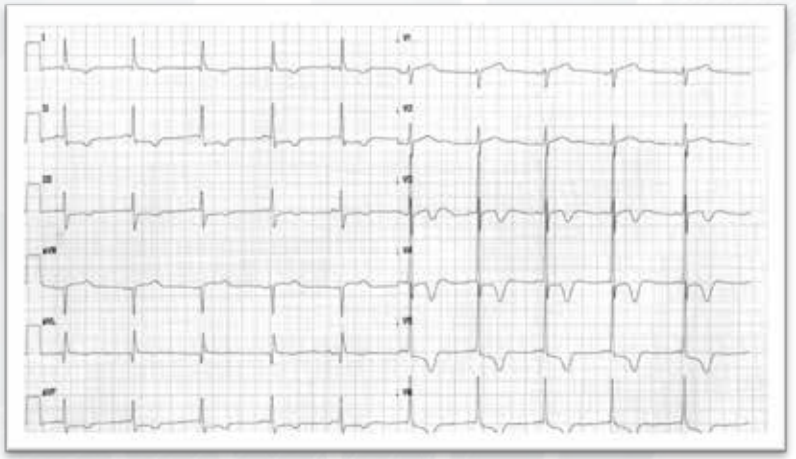
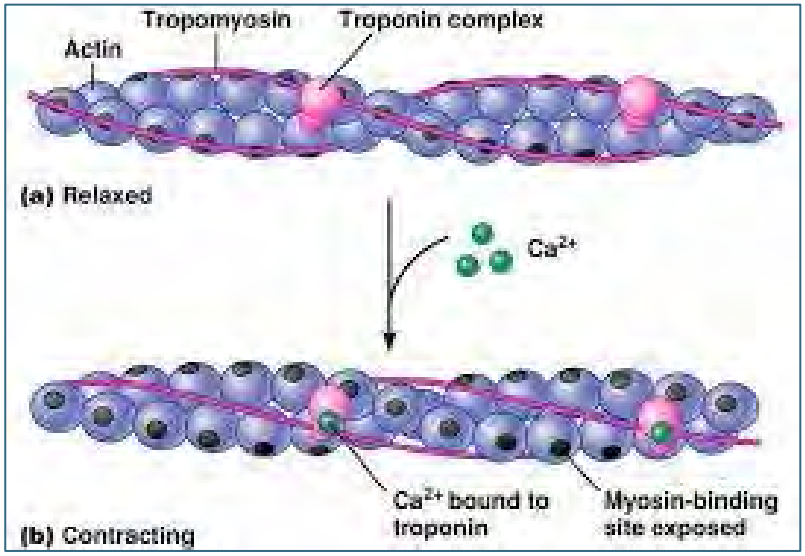
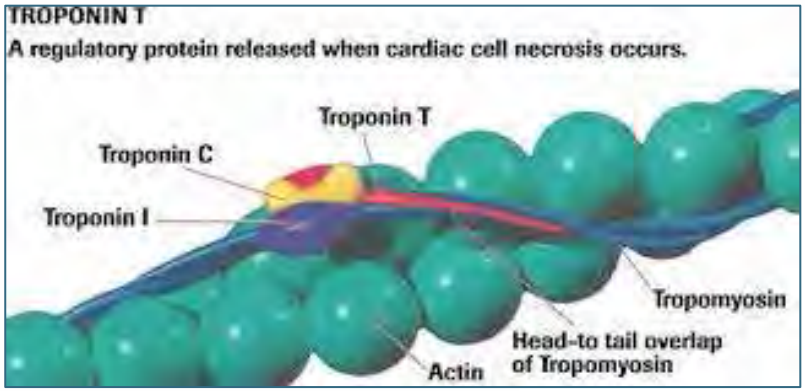




La troponina altamente sensibile (HS Troponin)





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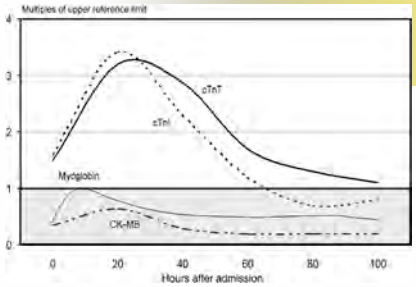

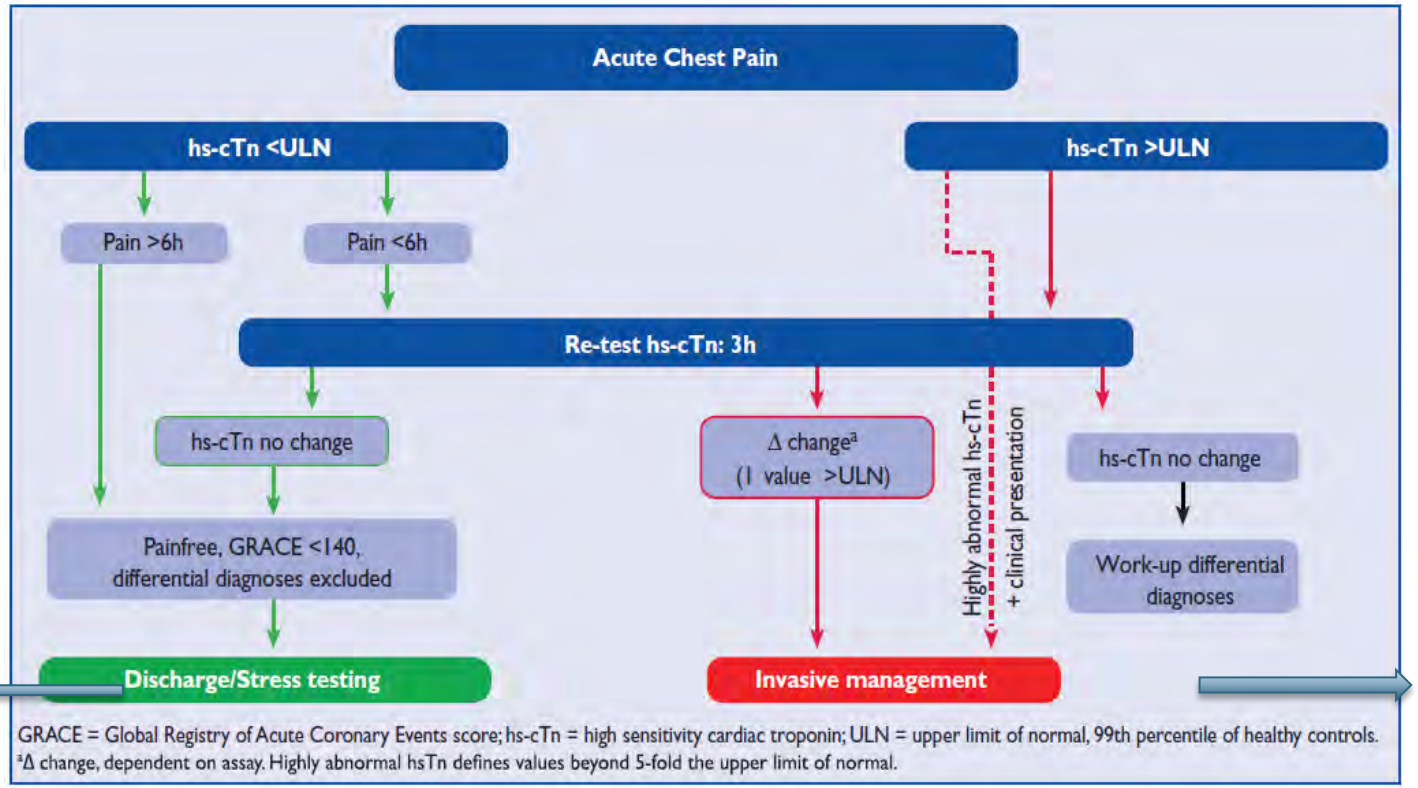

Rule out

Rule in

Un po' di storia del cuore e delle coronarie

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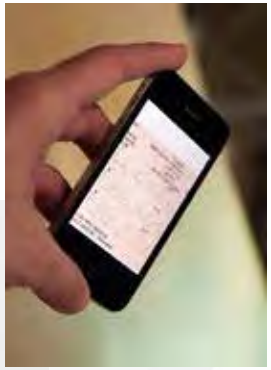
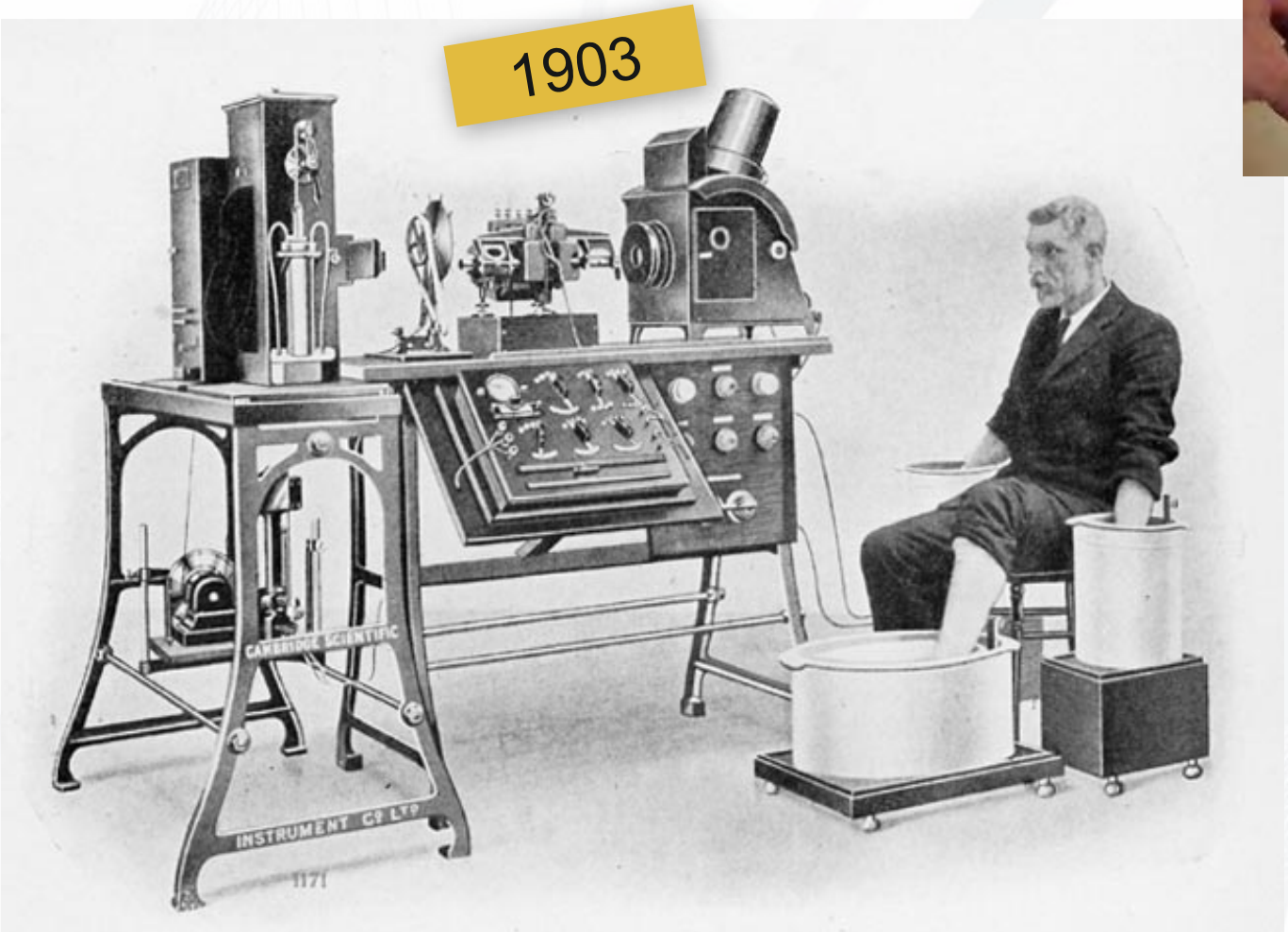
Il primo elettrocardiogramma





Photograph of a Complete Electrocardiograph, Showing the Manner in which the Electrodes are Attached to the Patient, In this Case the Hands and One Foot Being Immersed in Jars of Salt Solution

DIAGNOSI DELL'INFARTO

Primo defibrillatore

1947

ARRESTO CARDIACO

Dr. Claude de Beck. 1894-1971

Prima macchina cuore-polmone

CIRCOLAZIONE EXTRACORPOREA

Dr. Clarence Dennis
1909-2005

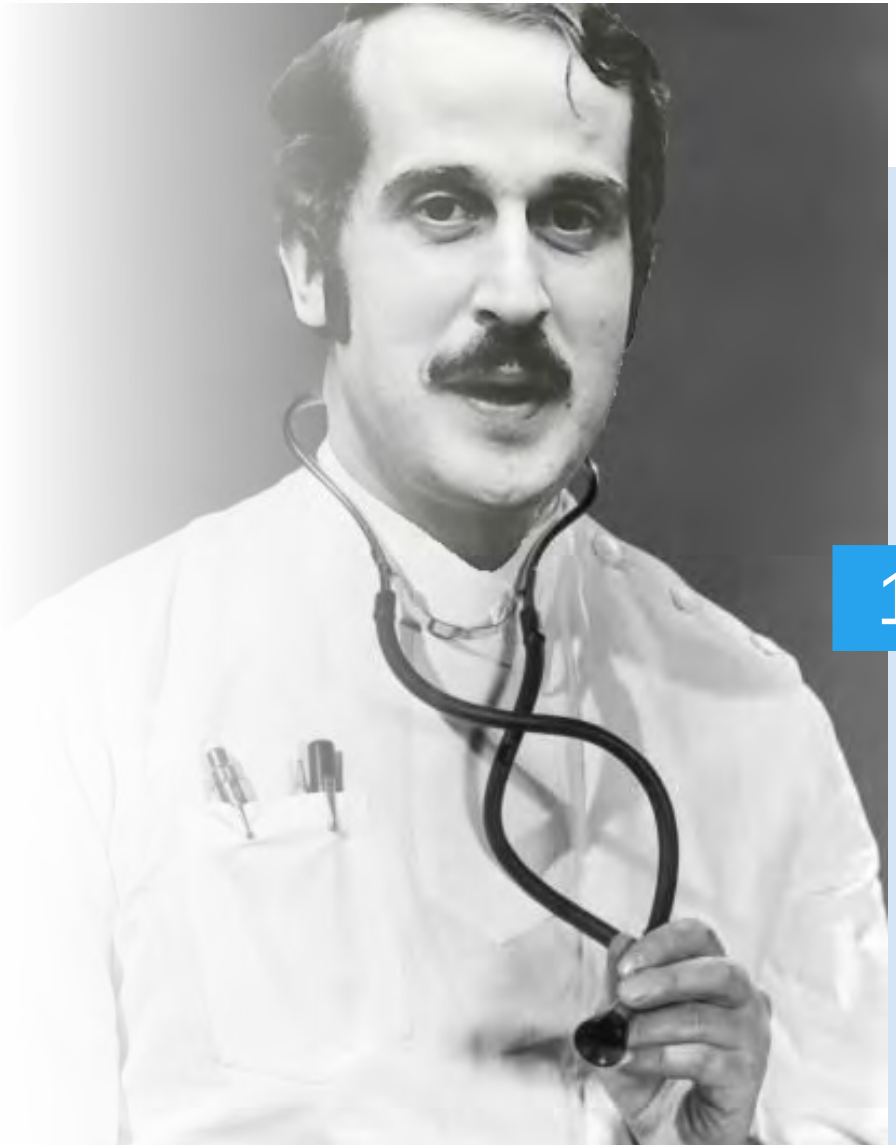
First aorto-coronary bypass

1967

BYPASS AORTO-CORONARICO

René Gerònimo Favaloro
1923 - 2000

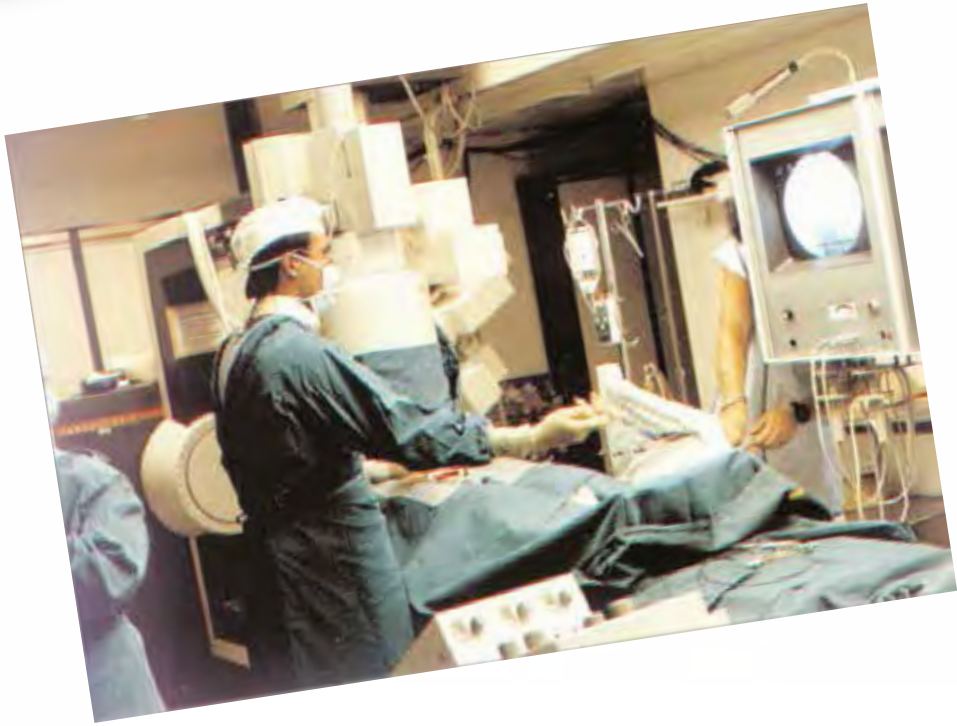
Il pionere di casa nostra: la prima coronarografia



1974

First Coronary Dilatation

1977



PTCA PRIMARIA

Andreas Grüntzig
1939 - 1984

A proposito di mortalità

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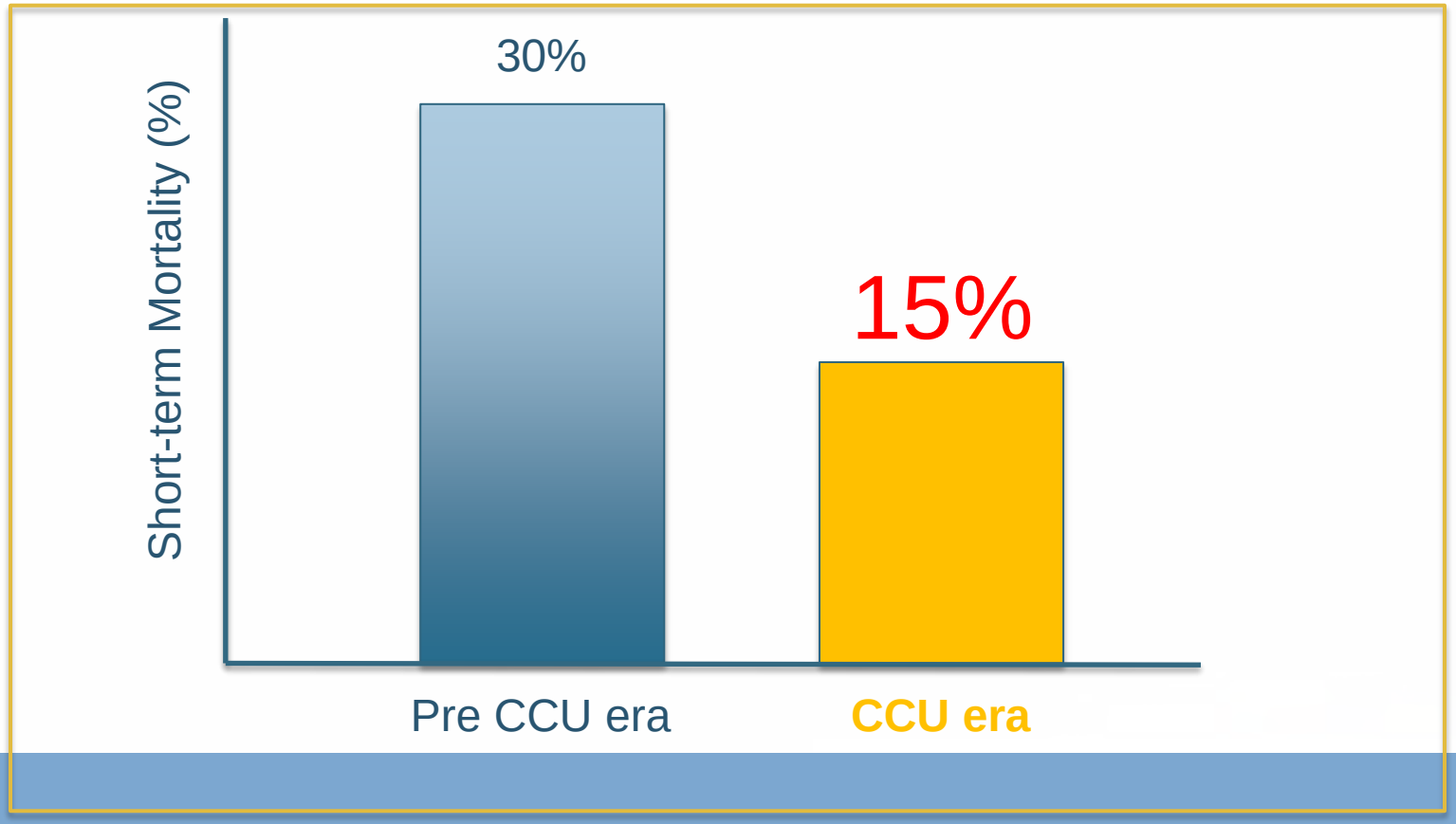
*Until 1961, patients with acute myocardial infarction – if **fortunate enough** to survive until they reached the hospital – were placed in **beds located throughout the hospital and far away from nusey's station that their rest would not be disturbed**. Patients were commonly found dead in their beds, presumably from a fatal tachyarrythmia. Indeed the **risk of death occuring in hospital** was approximately 30%.*

1960

From E.G. Nabel and E. Braunwald, N Engl J Med 2012;366:54-63

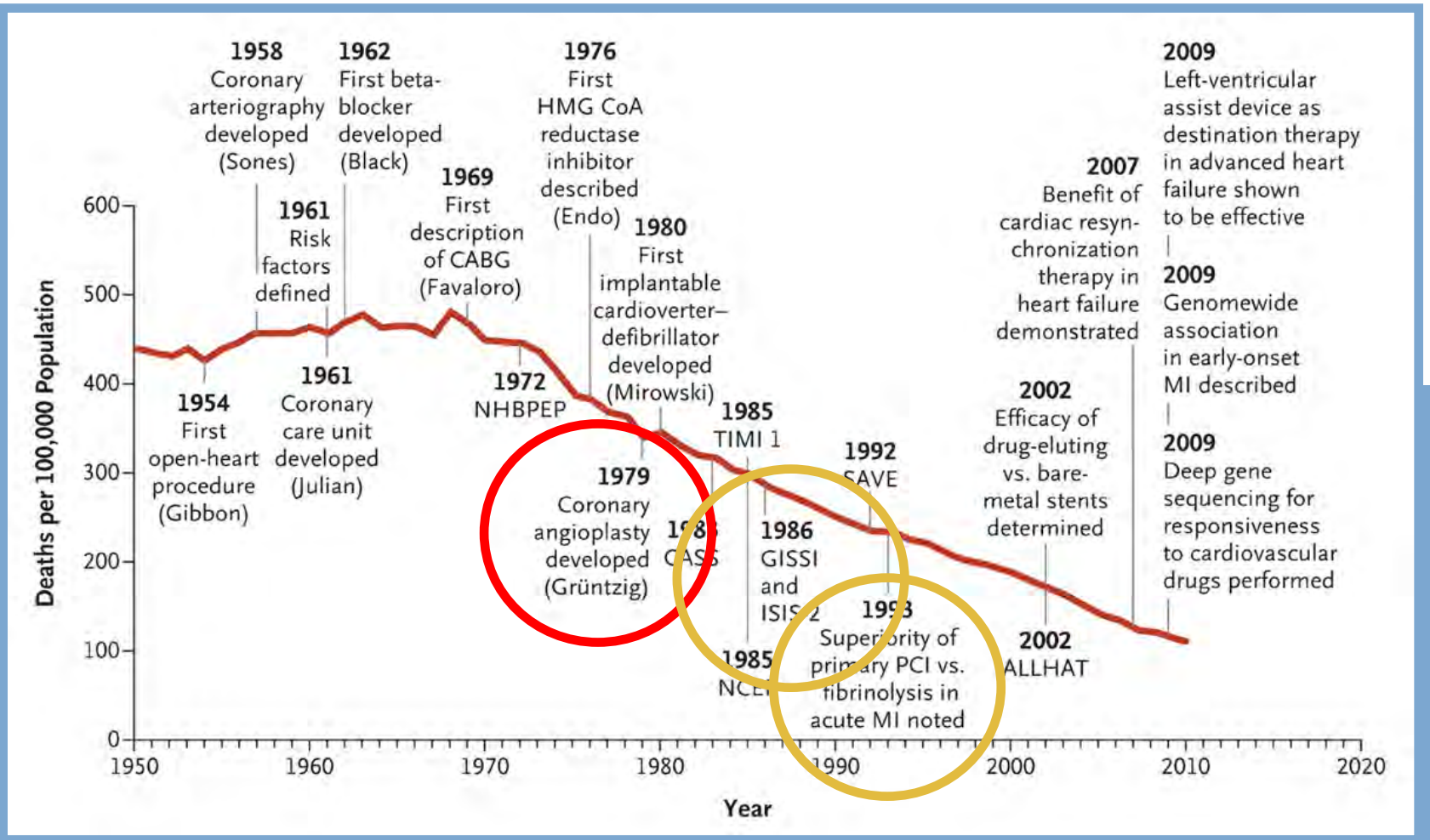
The NEW ENGLAND JOURNAL of MEDICINE

L’arrivo della cure intense (CCU)



1970

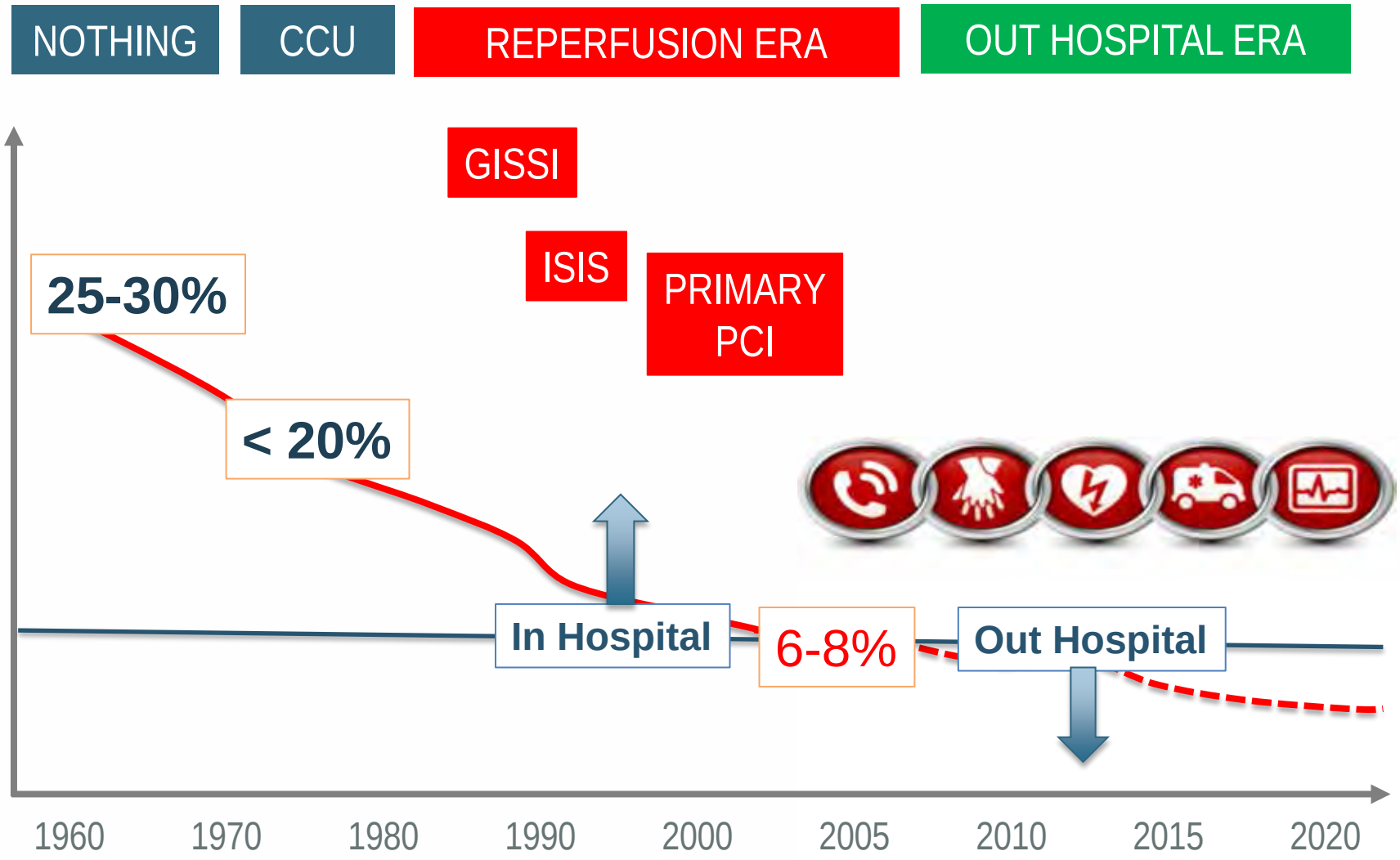
Decline in Deaths from Cardiovascular Disease in Relation to Scientific Advances



Nabel EG, Braunwald E. N Engl J Med 2012; 366:54-63

The NEW ENGLAND JOURNAL of MEDICINE

Riduzione della moratlità nella sindrome coronarca acuta



oggi

La sindrome coronarica acuta

OGGI

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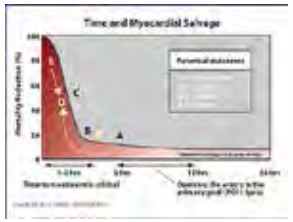
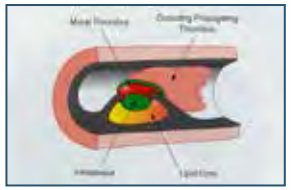
La sindrome coronarica acuta oggi

RETE
(Network)

SINDROME CORONARICA ACUTA: UN AFFARE DI SQUADRA

La sindrome coronarica acuta oggi





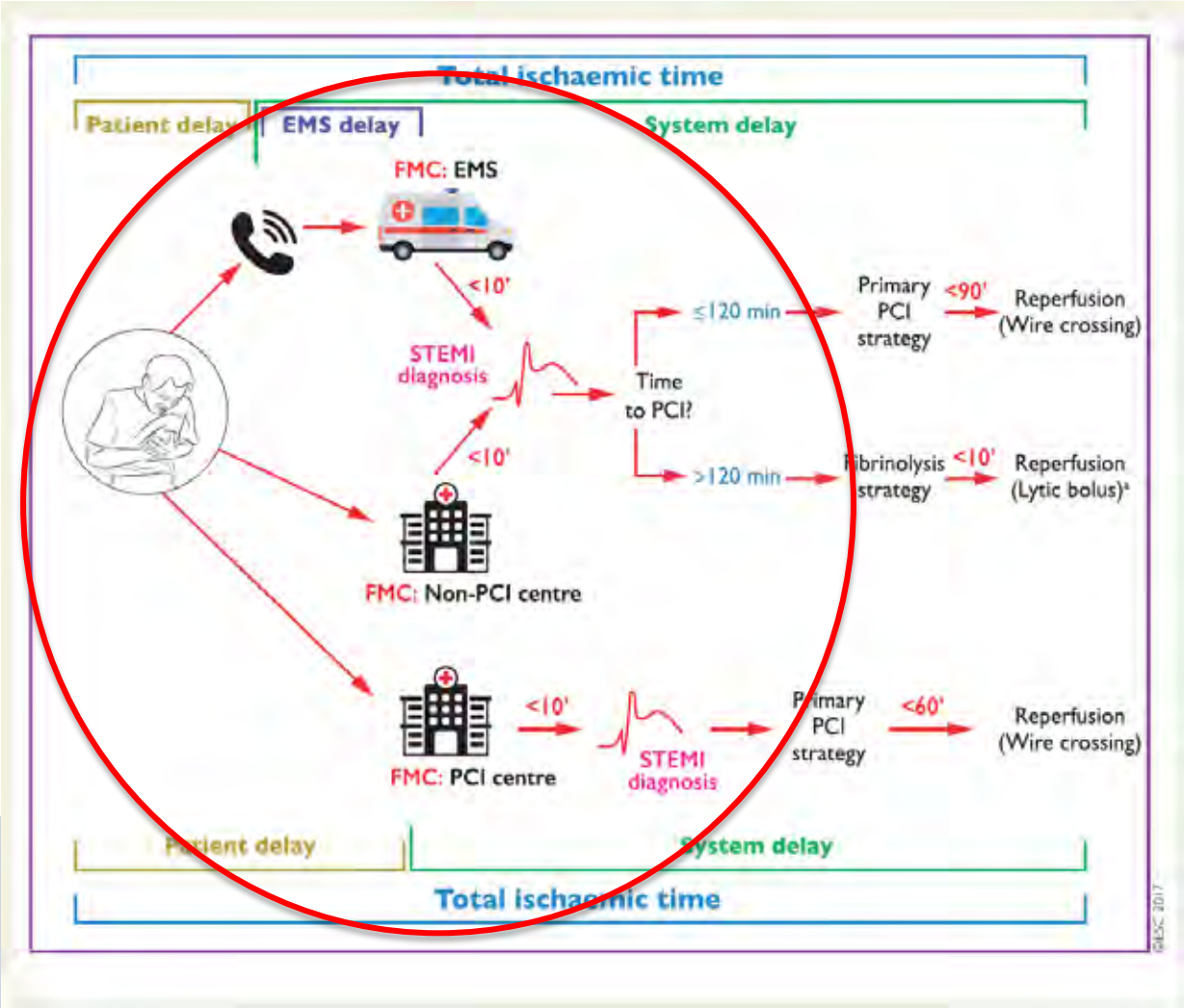
Rete Extraospedaliera
(Servizi ambulanza, REGA)

Rete Extraospedaliera
(Servizi ambulanza, REGA)

Il tempo ← RETE *(Network)* → Il rischio

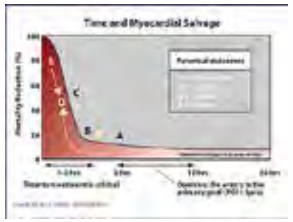
Rete Intraospedaliera
(Cardioanestesia, shock team)

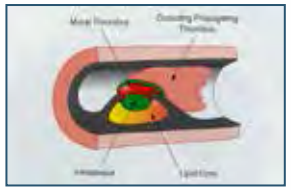
LA RETE



Linee guida Società Europea di Cardiologia 2017

La sindrome coronarica acuta oggi





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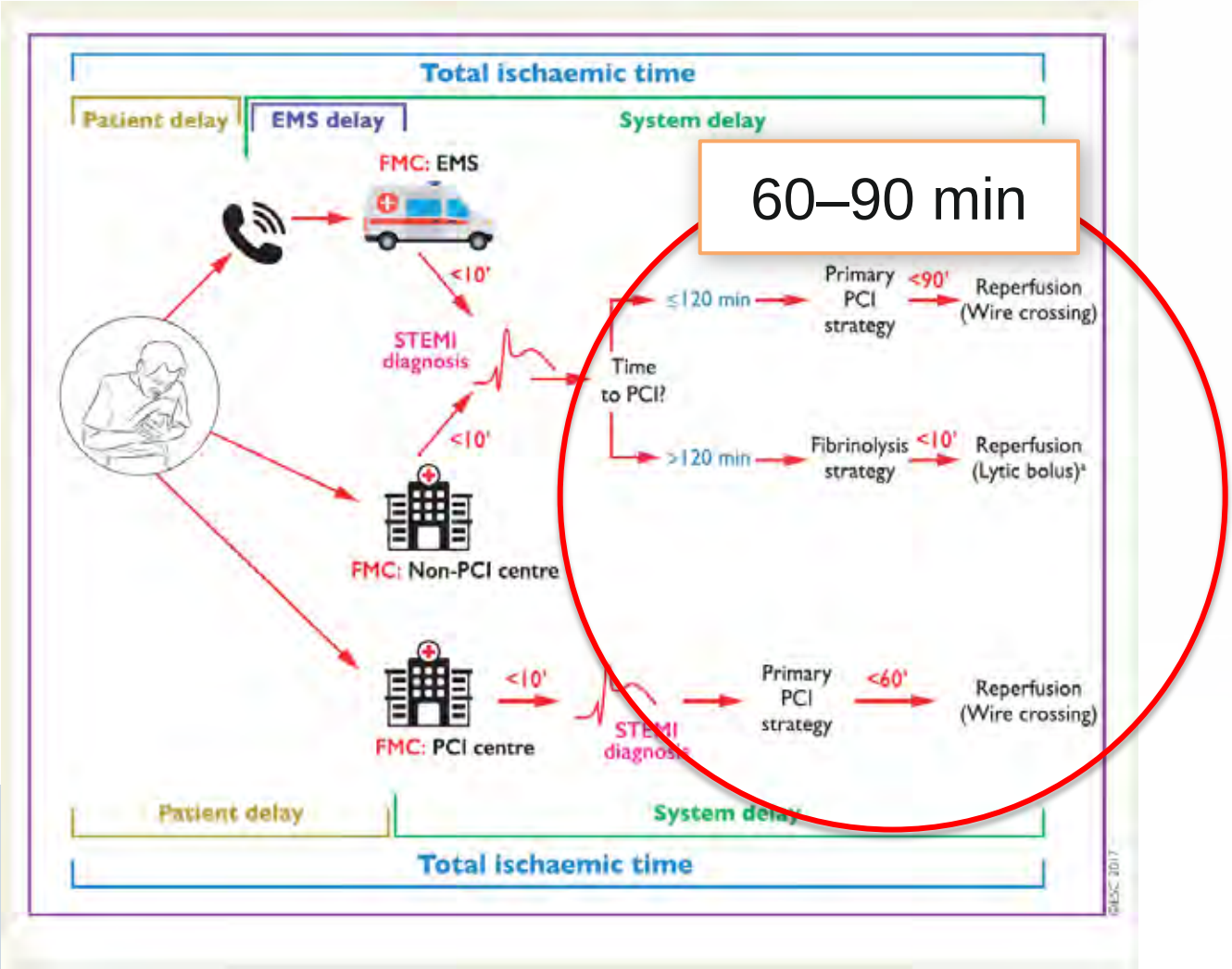
Il tempo ← RETE *(Network)* → Il rischio

Rete Intraospedaliera
(Cardioanestesia, shock team)

L'INTERVENTO
(PTCA, raramente bypass)

La/e lesione/i

La Dilatazione coronarica



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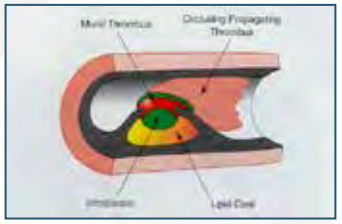
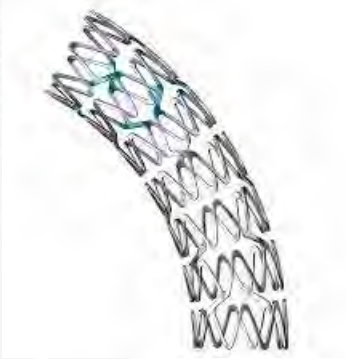
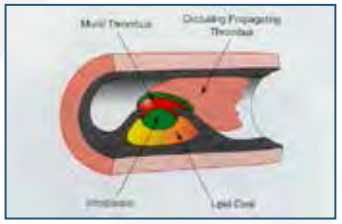
LA DILATAZIONE CORONARICA

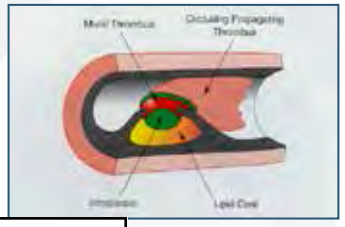




LA DILATAZIONE CORONARICA



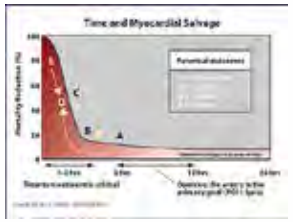
LA DILATAZIONE CORONARICA

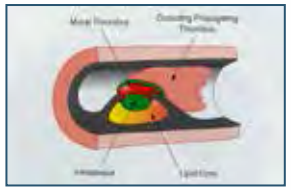


STEMI

OCCLUSIONE ACUTA R. INVENTRICOLARE ANTERIORE (RIVA)

La sindrome coronarica acuta oggi





Rete Extraospedaliera
(Servizi ambulanza, REGA)

Rete Extraospedaliera
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Il tempo

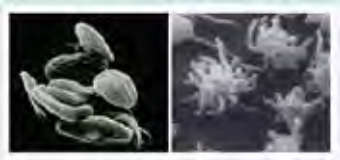
RETE
(Network)

Il rischio

Rete Intraospedaliera
(Cardioanestesia, shock team)

TERAPIA FARMACOLOGICA
(TERAPIA ANTITROMBOTICA/ ANTICOAGULANTE)

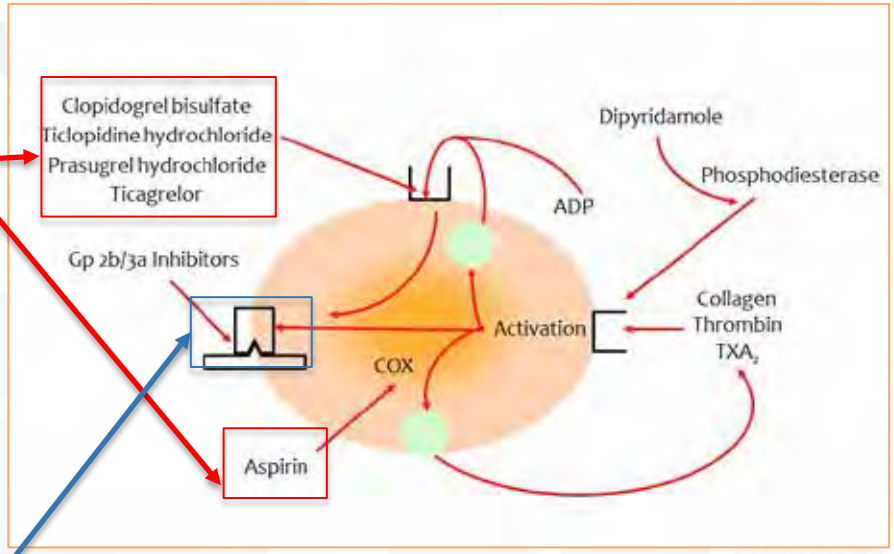
DILATAZIONE CORONARICA
(PTCA)

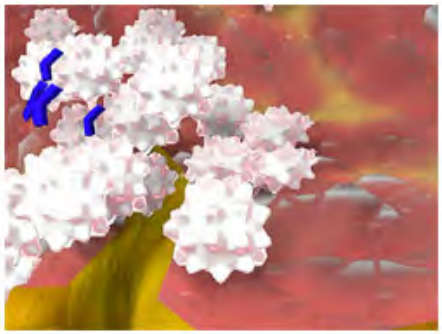


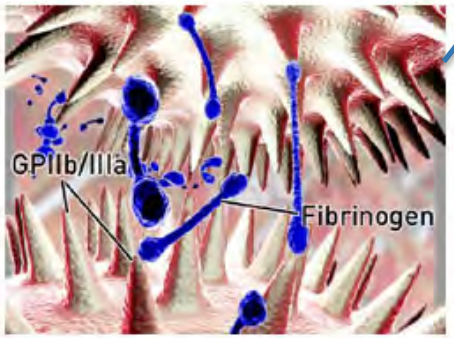
Il trombo

La lesione

La Terapia antitrombotica

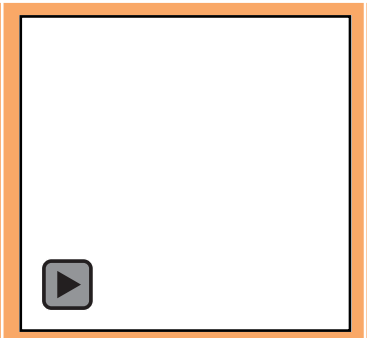


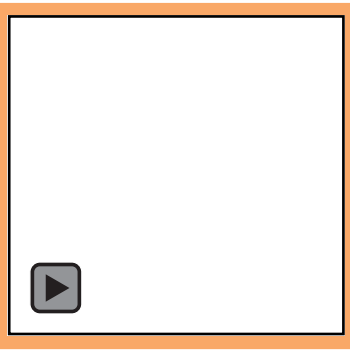


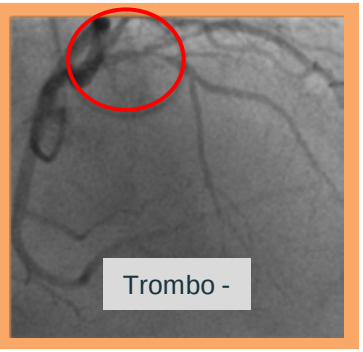


ASPIRINA + → PLAVIX / EFIENT / BRILIQUE

Gestione della sindrome coronarica acuta







Condizione clinica	STEMI	NSTEMI	Malattia coronarica stabile
Dilatazione coronarica	PTCA nei 60-90 minuti	PTCA nelle 24-48 ore	PTCA elettiva
Doppia Terapia antiaggregante			
• Prima dell'intervento (minuti) *Scopo: preparazione della lesione*	SI ASS + EFIENT	Controversa	NO
• Post-intervento (mesi) *Scopo: Protezione dello stent*	9-12 mesi (Ass + Efient)	9-12 mesi (Ass + Brilique)	3-6 mesi (Ass + Plavix)
• Lungo termine (anni) *Scopo: Protezione del paziente*	Controversa (casi selezionati)	Controversa (casi selezionati)	Controversa (casi selezionati)

Take home message

- La sindrome coronarica acuta, sia STEMI che NSTEMI, è una patologia frequente ad elevata mortalità
- I criteri diagnostici sono semplici e sicuri (sintomi, elettrocardiogramma, troponina).
- La troponina altamente sensibile (HS) permette di escludere al 100 una sindrome coronarica acuta entro le tre ore
- In caso di occlusione acuta (STEMI) l'obiettivo è di riaprire l'arteria < 60-90 minuti; in caso di NSTEMI è necessaria una diagnosi corretta ed un trattamento invasivo <24-48 ore

Grazie per la vostra attenzione

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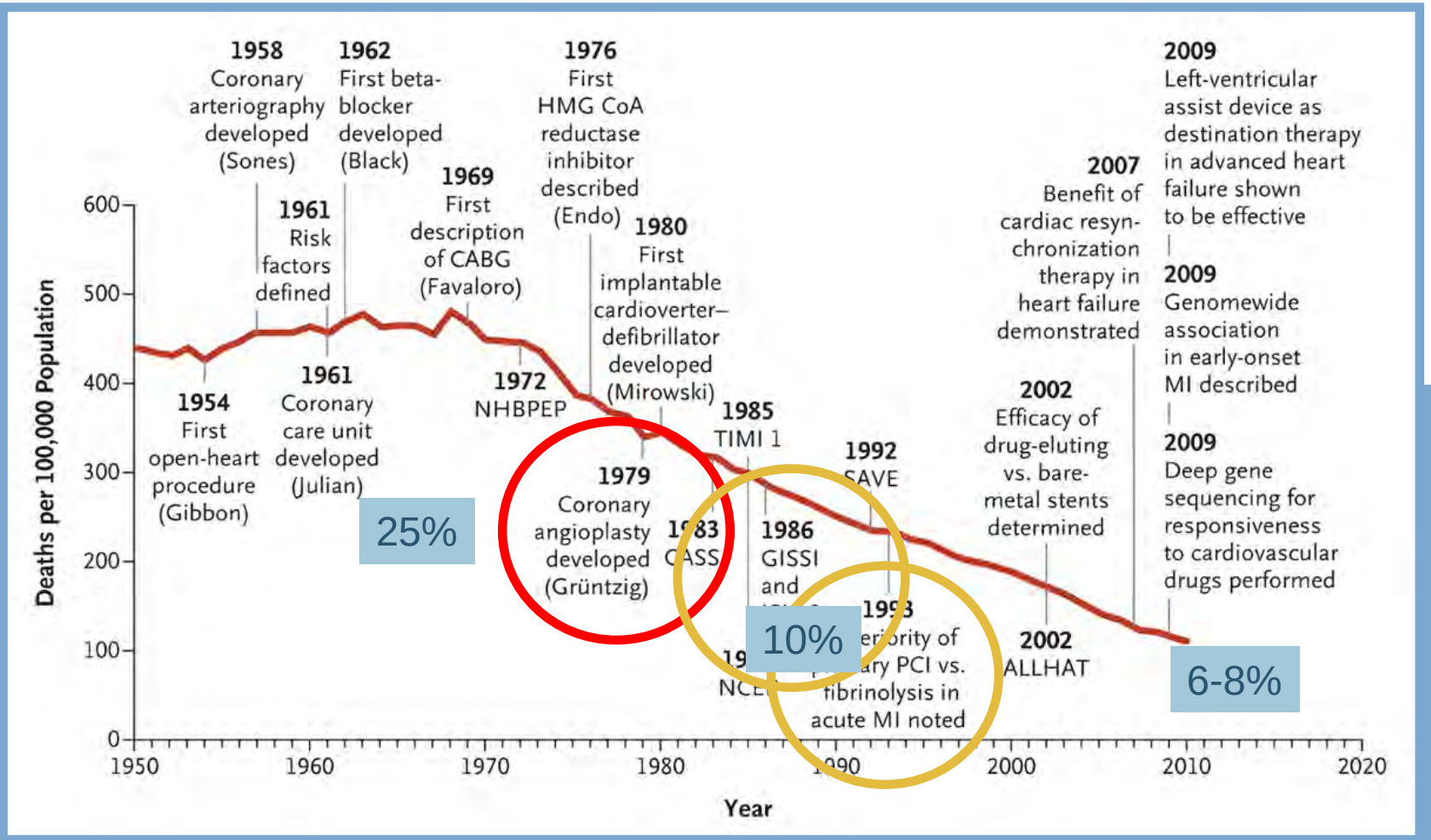
Thank you for your attention
Narsarsuaq, Greenland 2016

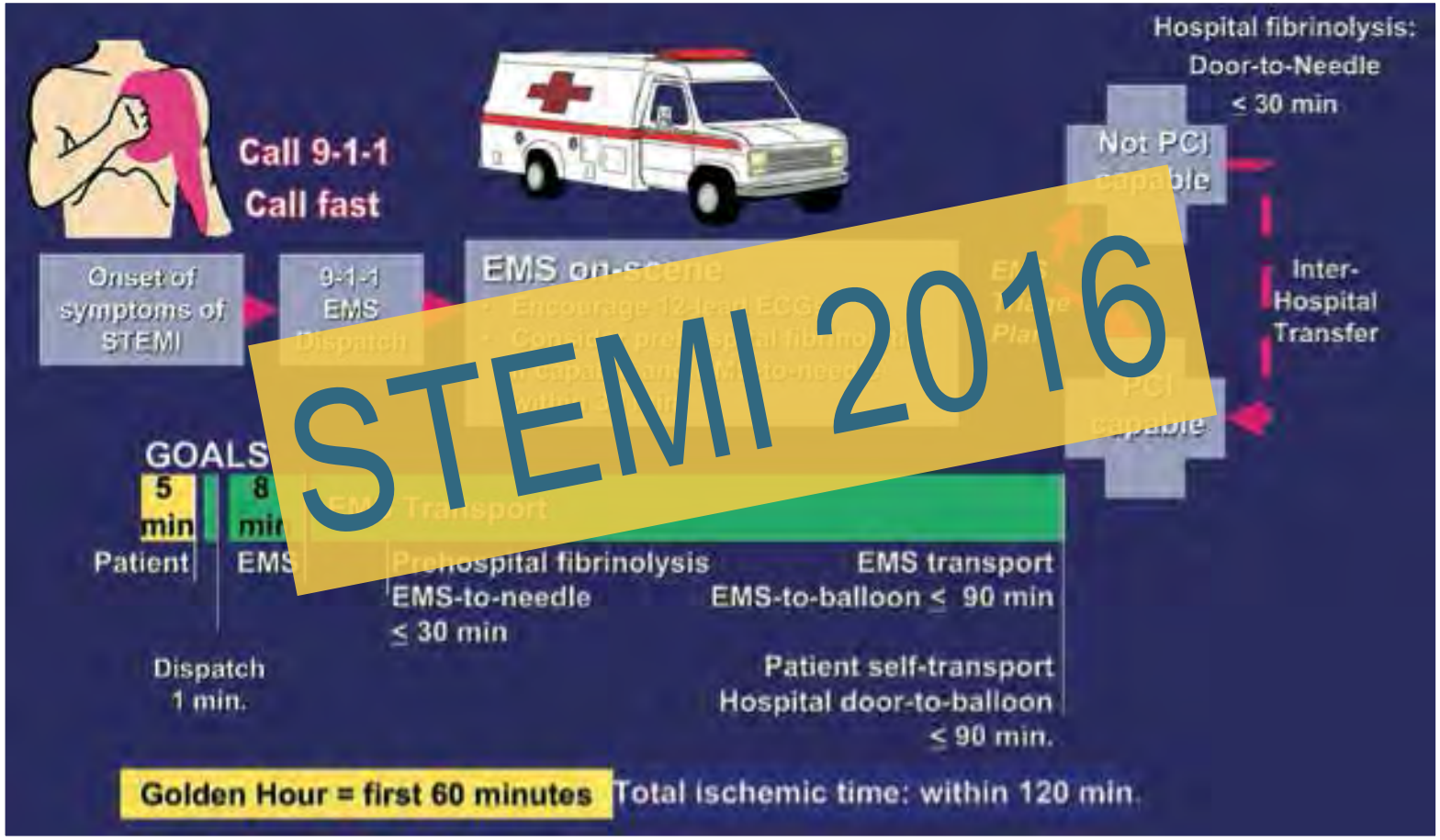
Decline in Deaths from Cardiovascular Disease in Relation to Scientific Advances



Nabel EG, Braunwald E. N Engl J Med 2012; 366:54-63

The NEW ENGLAND JOURNAL of MEDICINE

LA RETE



STEMI 2016

E.M. Antman, JACC 2008; 52, 28-ss

NATURAL HISTORY OF CORONARY ARTERY DISEASE*

ALBERT OBERMAN, M.D.

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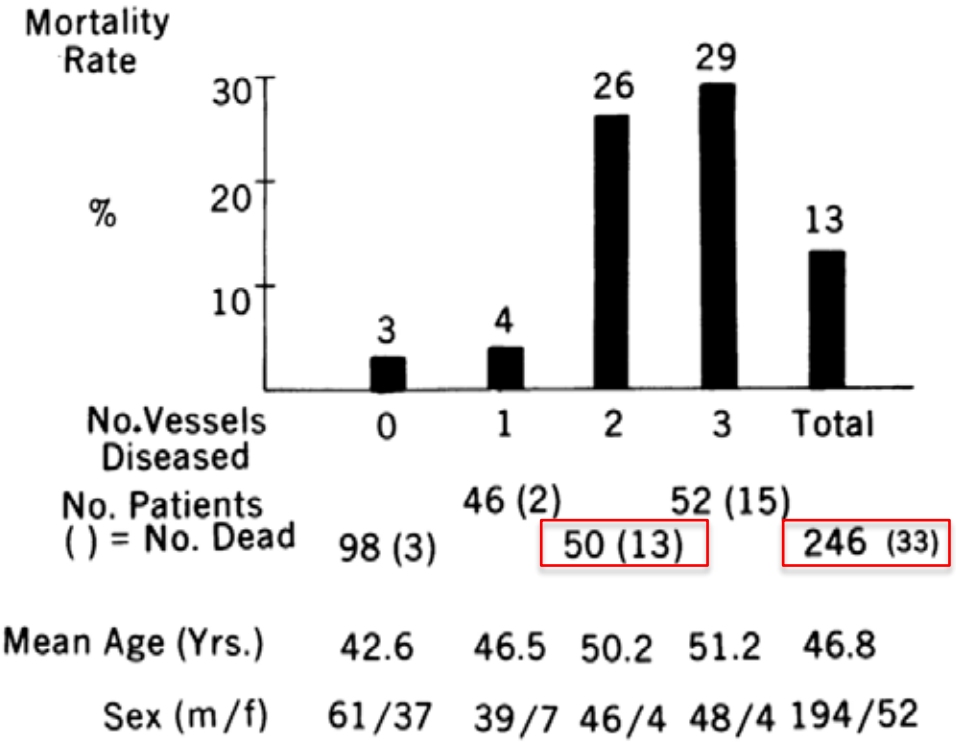

Fig. 1. Mortality by selected characteristics and number of vessels diseased.

Conference on Myocardial Revascularization, 9 october 1972