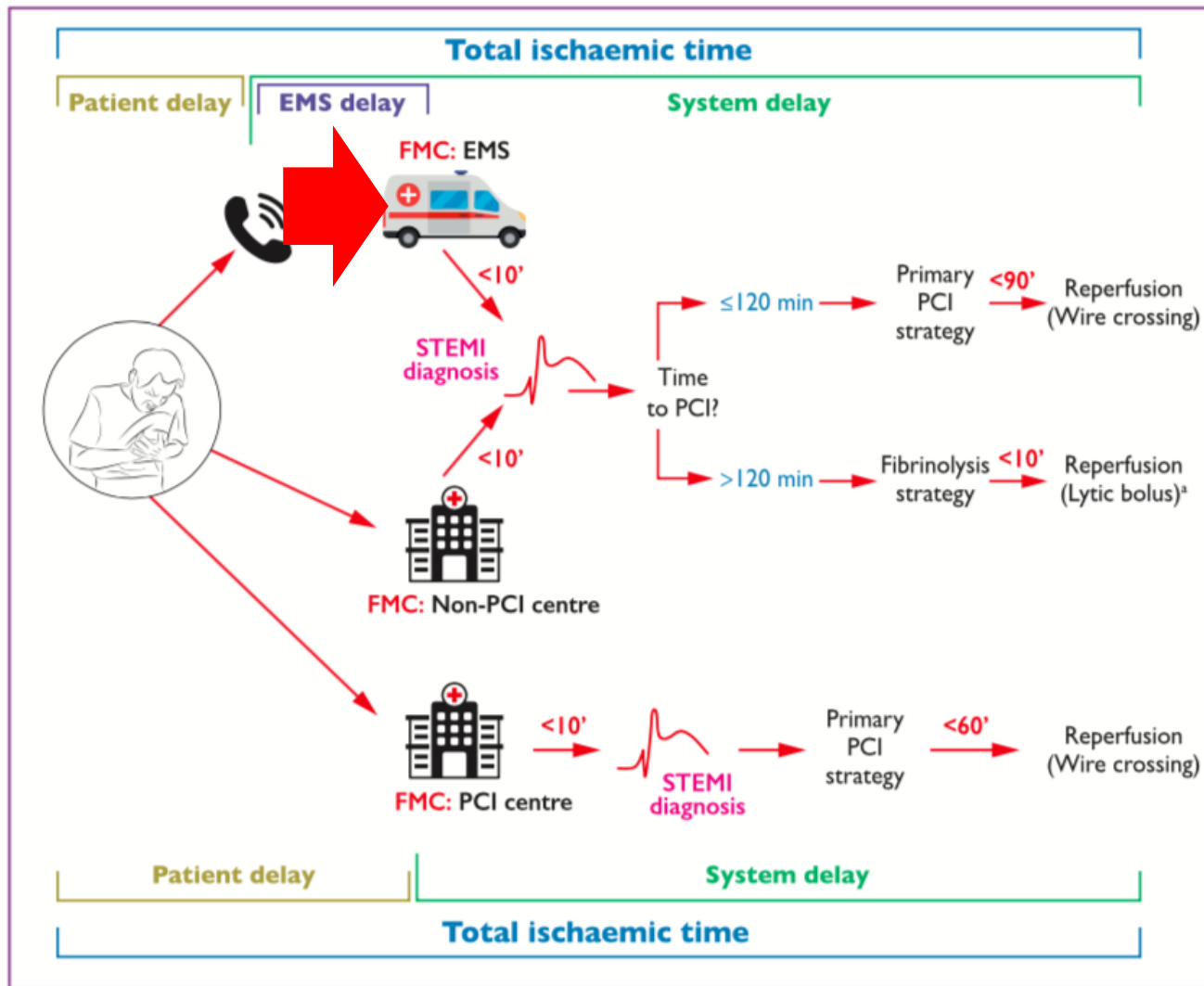


# 2018 de STEMI Tedavisinde Fibrinolitik Tedavi

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**Prof. Dr. Oktay Ergene**

# Müracaat Yerine Göre Reperfüzyon Stratejisi Seçimi ve Zamanlaması



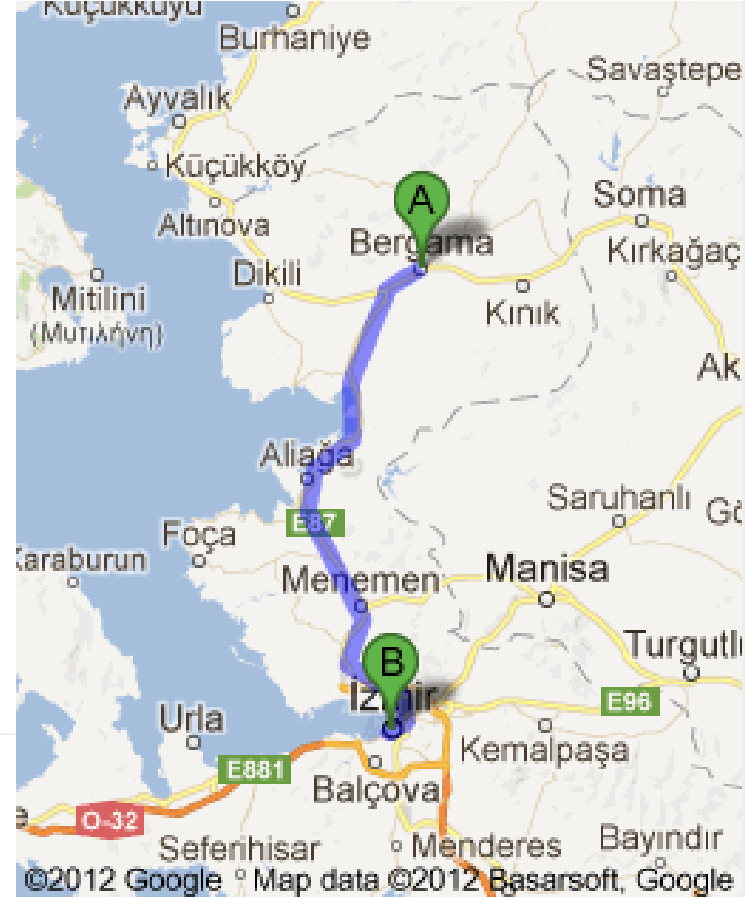
# PPKG mi ? Fibrinolitik Tedavi mi ?

Başlangıç noktası: Bergama  
Varış noktası: İzmir

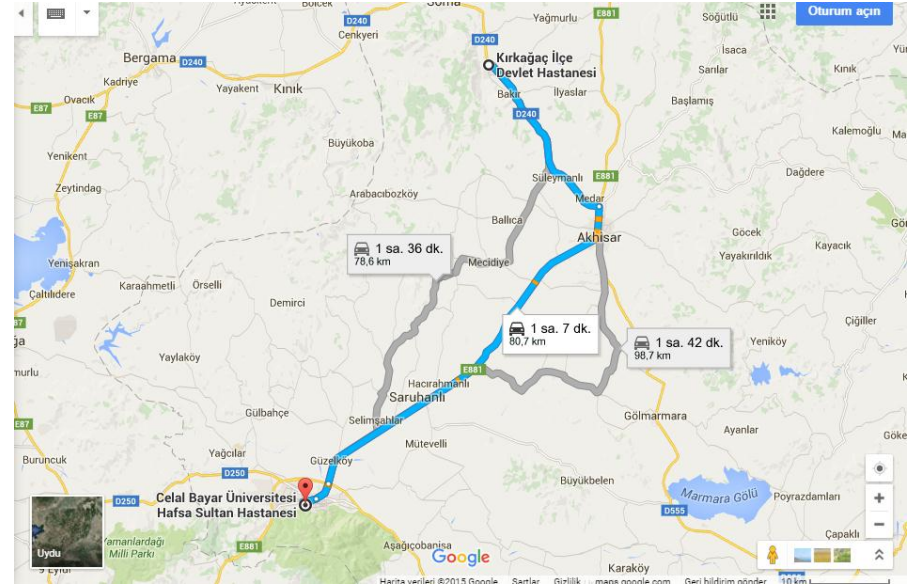
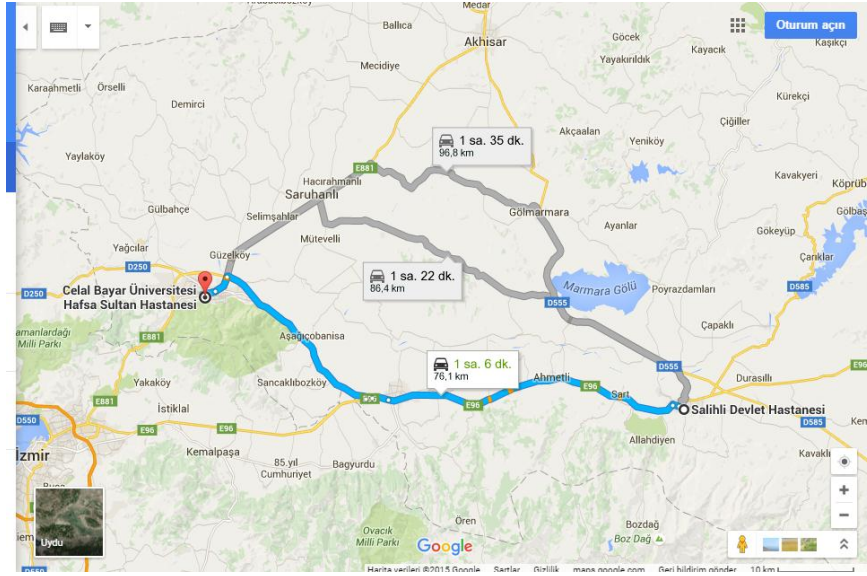
Süre: 2 saat 10 dk

Mesafe  
106,0 km

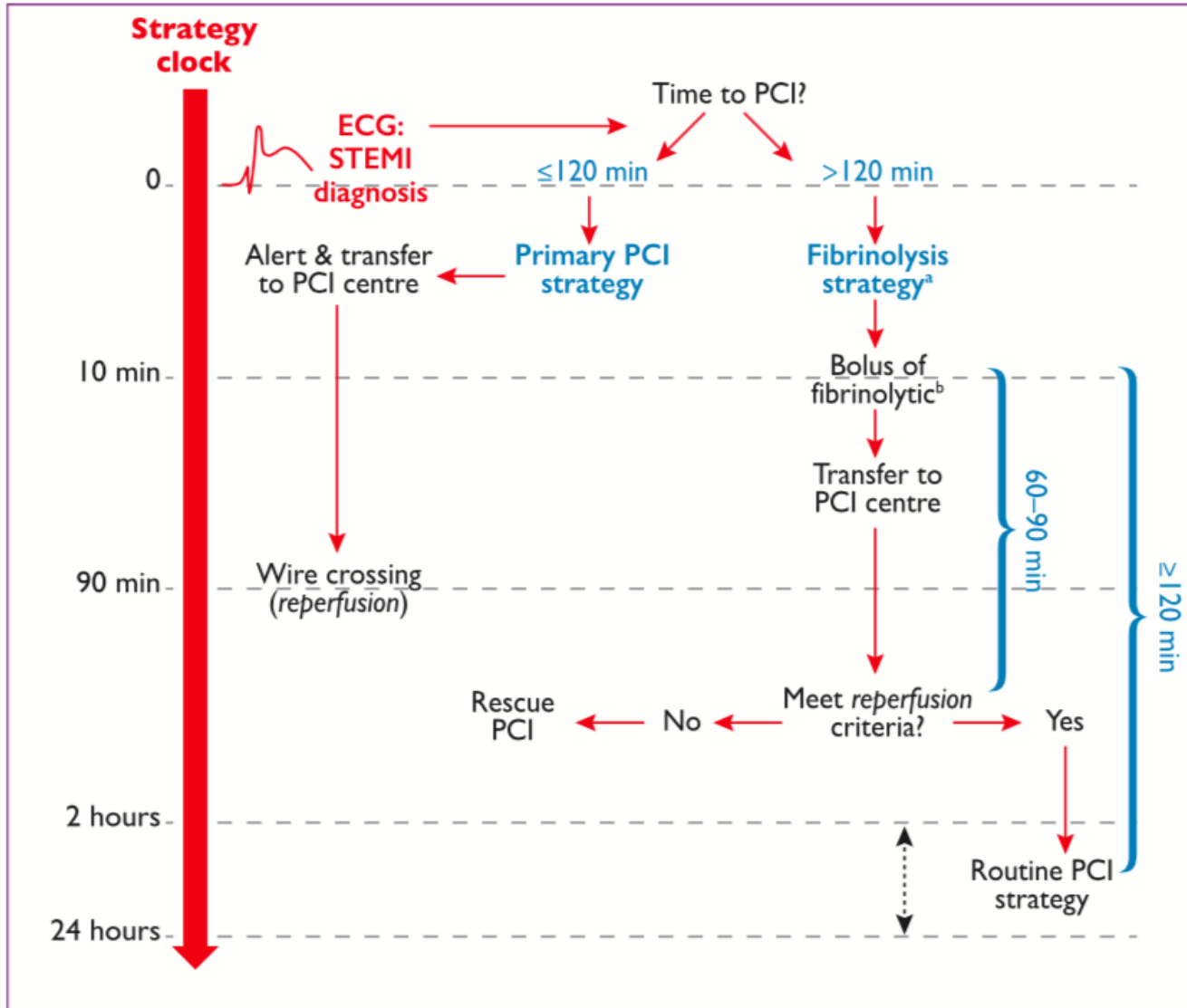
Rota  
D550/E87



# PPKG mi ? Fibrinolitik Tedavi mi ?



# Reperfüzyon Stratejisine Seçimine Göre Zamanlama



# Fibrinoliz ve Farmakoinvazif Strateji

## Fibrinolitik Tedaviyle Birlikte Antiplatelet Tedavi için Öneriler

| Recommendations                                                                                                                                                                                         | Class <sup>a</sup> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| When fibrinolysis is the reperfusion strategy, it is recommended to initiate this treatment as soon as possible after STEMI diagnosis, preferably in the pre-hospital setting. <sup>96,98,123,222</sup> | I                  |
| A fibrin-specific agent (i.e. tenecteplase, alteplase, or reteplase) is recommended. <sup>223,224</sup>                                                                                                 | I                  |
| A half-dose of tenecteplase should be considered in patients $\geq 75$ years of age. <sup>121</sup>                                                                                                     | IIa                |
| <b>Antiplatelet co-therapy with fibrinolysis</b>                                                                                                                                                        |                    |
| Oral or i.v. aspirin is indicated. <sup>213</sup>                                                                                                                                                       | I                  |
| Clopidogrel is indicated in addition to aspirin. <sup>225,226</sup>                                                                                                                                     | I                  |
| DAPT (in the form of aspirin plus a P2Y <sub>12</sub> inhibitor <sup>c</sup> ) is indicated for up to 1 year in patients undergoing fibrinolysis and subsequent PCI.                                    | I                  |

# Fibrinolitik Tedavi, Fibrinolitik Tedaviyle Birlikte Antikuagulan ve Girişimsel Tedavi için Öneriler

| Anticoagulation co-therapy with fibrinolysis                                                                                                                                                                                        |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Anticoagulation is recommended in patients treated with lytics until revascularization (if performed) or for the duration of hospital stay up to 8 days. <sup>199,224,227–233</sup> The anticoagulant can be:                       | I   |
| ● Enoxaparin i.v. followed by s.c. (preferred over UFH). <sup>227–232</sup>                                                                                                                                                         | I   |
| ● UFH given as a weight-adjusted i.v. bolus followed by infusion. <sup>224</sup>                                                                                                                                                    | I   |
| ● In patients treated with streptokinase: fondaparinux i.v. bolus followed by an s.c. dose 24 h later. <sup>199,233</sup>                                                                                                           | IIa |
| Transfer after fibrinolysis                                                                                                                                                                                                         |     |
| Transfer to a PCI-capable centre following fibrinolysis is indicated in all patients immediately after fibrinolysis. <sup>121,124,126–130,234</sup>                                                                                 | I   |
| Interventions following fibrinolysis                                                                                                                                                                                                |     |
| Emergency angiography and PCI if indicated is recommended in patients with heart failure/shock. <sup>124, 235</sup>                                                                                                                 | I   |
| Rescue PCI is indicated immediately when fibrinolysis has failed (<50% ST-segment resolution at 60–90 min) or at any time in the presence of haemodynamic or electrical instability, or worsening ischaemia. <sup>121,124,236</sup> | I   |
| Angiography and PCI of the IRA, if indicated, is recommended between 2 and 24 h after successful fibrinolysis. <sup>125–128,234</sup>                                                                                               | I   |
| Emergency angiography and PCI if needed is indicated in the case of recurrent ischaemia or evidence of reocclusion after initial successful fibrinolysis. <sup>124</sup>                                                            | I   |

# Fibrinolitik Tedavide Kullanılan Ajanların Dozları için Öneriler

| Doses of fibrinolytic therapy |                                                                                                                                                                                                                                                                                 |                                                       |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Streptokinase                 | 1.5 million units over 30–60 min i.v.                                                                                                                                                                                                                                           | Previous treatment with streptokinase or anistreplase |
| Alteplase (tPA)               | 15 mg i.v. bolus<br>0.75 mg/kg i.v. over 30 min (up to 50 mg)<br>then 0.5 mg/kg i.v. over 60 min (up to 35 mg)                                                                                                                                                                  |                                                       |
| Reteplase (rPA)               | 10 units + 10 units i.v. bolus given 30 min apart                                                                                                                                                                                                                               |                                                       |
| Tenecteplase (TNK-tPA)        | Single i.v. bolus:<br>30 mg (6000 IU) if <60 kg<br>35 mg (7000 IU) if 60 to <70 kg<br>40 mg (8000 IU) if 70 to <80 kg<br>45 mg (9000 IU) if 80 to <90 kg<br>50 mg (10000 IU) if ≥90 kg<br>It is recommended to reduce to half-dose in patients ≥75 years of age. <sup>121</sup> |                                                       |



## 2014 ACCF/AHA NSTEMI Güncellemesi

**Table 9. Dosing of Parenteral Anticoagulants During PCI**

| Drug*      | In Patients Who Have Received Prior Anticoagulant Therapy                                                                                                                                                                                                                                                                                                                  | In Patients Who Have Not Received Prior Anticoagulant Therapy                                                                                                                                                                                       |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Enoxaparin | <ul style="list-style-type: none"><li>• For prior treatment with enoxaparin, if last SC dose was administered 8–12 h earlier or if &lt;2 therapeutic SC doses of enoxaparin have been administered, an IV dose of enoxaparin 0.3 mg/kg should be given</li><li>• If the last SC dose was administered within prior 8 h, no additional enoxaparin should be given</li></ul> | <ul style="list-style-type: none"><li>• 0.5 mg/kg–0.75 mg/kg IV loading dose</li></ul>                                                                                                                                                              |
| UFH        | <ul style="list-style-type: none"><li>• IV GPI planned: additional UFH as needed (e.g., 2,000–5,000 U) to achieve ACT of 200–250 s</li><li>• No IV GPI planned: additional UFH as needed (e.g., 2,000–5,000 U) to achieve ACT of 250–300 s for HemoTec, 300–350 s for Hemochron</li></ul>                                                                                  | <ul style="list-style-type: none"><li>• IV GPI planned: 50–70 U/kg loading dose to achieve ACT of 200–250 s</li><li>• No IV GPI planned: 70–100 U/kg loading dose to achieve target ACT of 250–300 s for HemoTec, 300–350 s for Hemochron</li></ul> |

# Fibrinolitik Tedavide Kontrendikasyonlar

## Absolute

Previous intracranial haemorrhage or stroke of unknown origin at anytime

Ischaemic stroke in the preceding 6 months

Central nervous system damage or neoplasms or arteriovenous malformation

Recent major trauma/surgery/head injury (within the preceding month)

Gastrointestinal bleeding within the past month

Known bleeding disorder (excluding menses)

Aortic dissection

Non-compressible punctures in the past 24 hours (e.g. liver biopsy, lumbar puncture)

## Relative

Transient ischaemic attack in the preceding 6 months

Oral anticoagulant therapy

Pregnancy or within 1 week postpartum

Refractory hypertension (SBP >180 mmHg and/or DBP >110 mmHg)

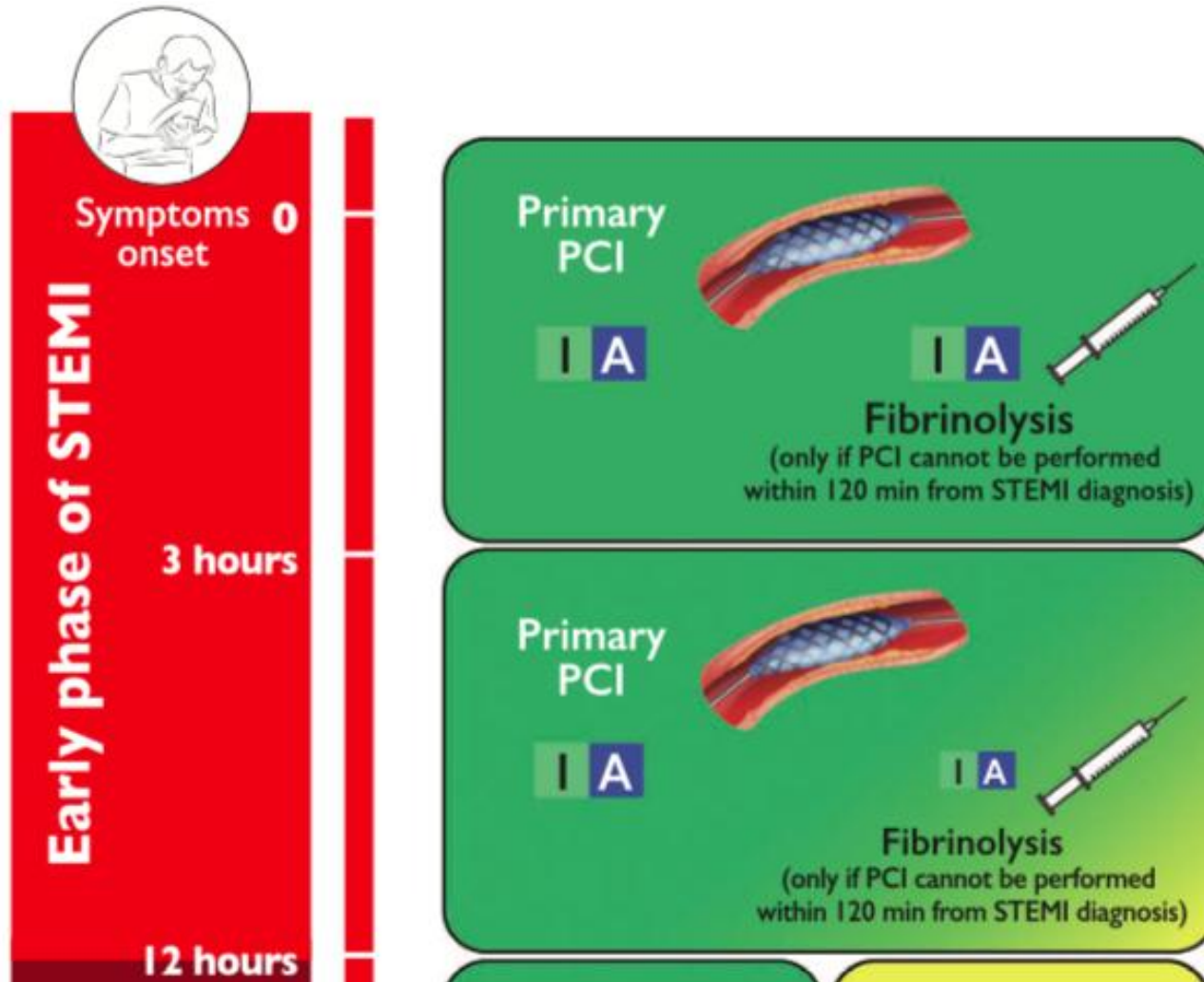
Advanced liver disease

Infective endocarditis

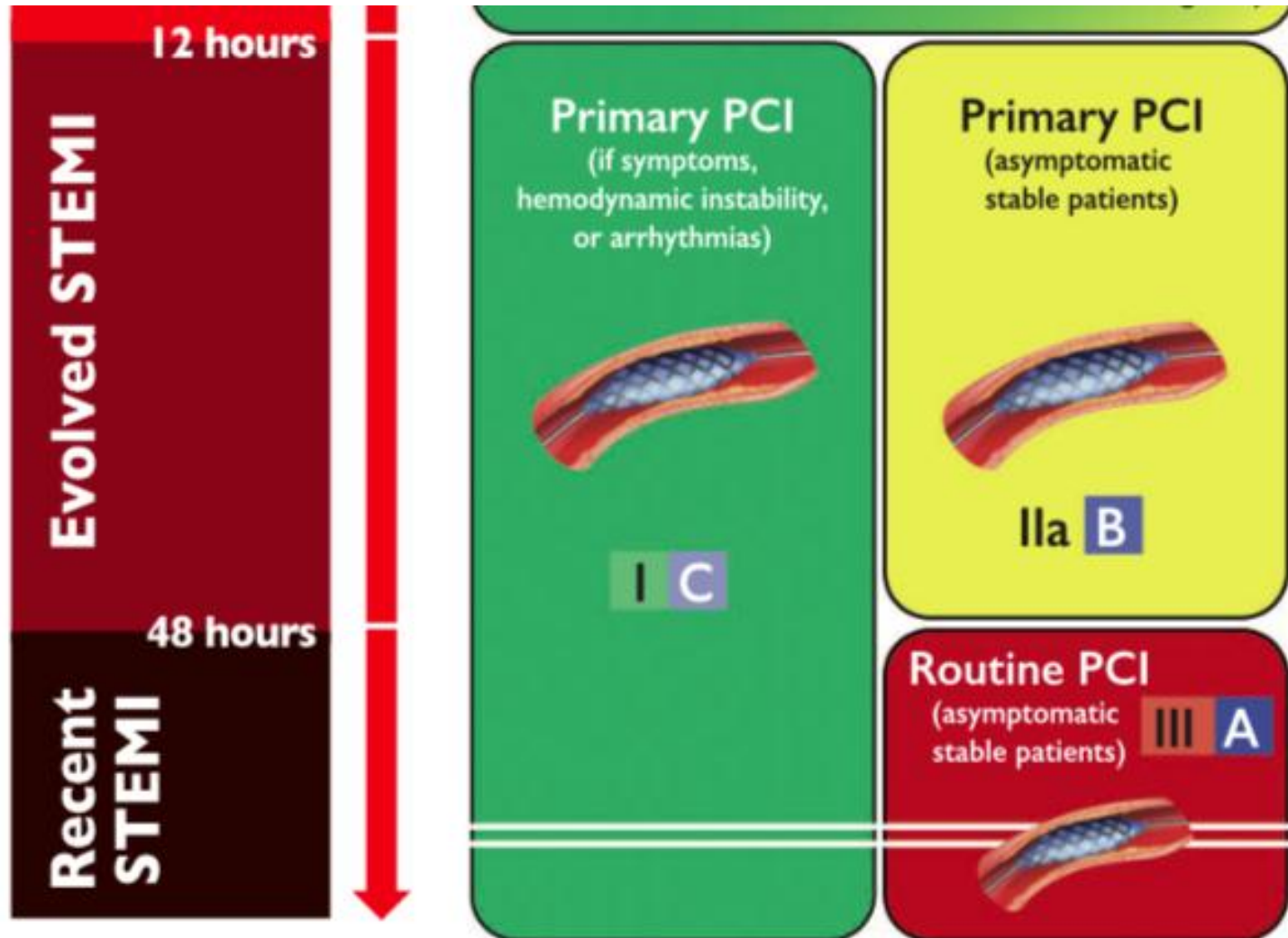
Active peptic ulcer

Prolonged or traumatic resuscitation

# Reperfüzyon Stratejisi Seçiminde İlk 12 saat için Öneriler (Özet)



# Reperfüzyon Stratejisi Seçiminde İlk 12 Saatten Sonrası için Öneriler (Özet)



# Değişen Ne Var ?

- İlk Medikal Temas (First Medical Contact, FMC) tanımı değişti
- Fibrinolitik Tedavi-Primer PKG stratejisi seçiminde STEMI tanısından telin geçişine kadar olan sürenin 120 dk altında öngörülüyor olması
- Fibrinolitik tedavi başlama zamanı 30 dk dan 10 dk çekildi

## Değişen Ne Var ?

- Fibrinoliz (tercihan bolüs) sonrası hasta hemen PKG merkezine sevk edilmeli
- Fibrinolitik tedavi sonrası reperfüzyonun başarısını (başarısızlığı) değerlendirmek amacıyla 60. dk EKG değerlendirilmesi öneriliyor (daha önce 90. dk)
- Fibrinolitik tedavi sonrasında hastaların 2. saatten sonra kateter labratuvarına alınmasına izin veriyor (2-24 saat aralığında katater labratuvarına alınması, daha önce 3-24 saat)

# Değişen Ne Var ?

- **Fibrinolitik tedavi yle birlikte Sınıf I endikasyonla enoxaheparin önerildi (IV daha sonra SC)**
- **Tenektaplaz için 75 yaş üstü olgularda yarım doz önerisi geldi**



**Teşekkürler**