**Thrombodynamics-4D**
next dimension of thrombin generation

*Spatial dynamics of fibrin clot formation and thrombin generation in one experimental assay*

- Highly sensitive to hypercoagulation states, reveals patients with high thrombosis risk.
- Allows monitoring of efficacy & safety of anticoagulant therapy (including DOACs).
- Global coagulation test - easy for understanding and interpretation.

\[\text{THROMBODYNAMICS-4D} = \text{THROMBODYNAMICS} + \text{THROMBIN GENERATION}\]

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Fibrin clot formation and Thrombin generation in time and space

Thrombodynamics-4D allows monitoring spatial dynamics of thrombin generation using an AMC-based fluorogenic substrate simultaneously with registration of spatial fibrin clot growth from the TF-bearing surface:

- Reconstruction of blood vessel wall damage in vitro
- Physiological activation of coagulation
- Real-time observation of fibrin clot propagation and thrombin generation

![Thrombodynamics-4D disposable](image)

Images from Thrombodynamics Analyser T2-T

- 2 min
- 10 min
- 30 min

Application and benefits

Benefits:

- Minimizing complications (e.g. post surgery)
- Highest sensitivity to all anticoagulants, including DOACs
- High inter- and intra-laboratory reproducibility (CV <10%)
- Individual sample handling

Detection of risk of thrombotic complications and efficacy of pro- and anticoagulant therapy:

- After major surgery
- In pregnancy complications
- In critically ill patients
- In cancer patients
- In liver cirrhosis
- In patients with hormonal treatments

Research:

- Evaluation of procoagulant activity of molecules and materials
- Study of mechanisms of coagulation and anti-coagulant treatment

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Fibrin clot formation

Spatial thrombin propagation from coagulation activator.

Thrombin generation on activating surface.

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### Ordering information

<table>
<thead>
<tr>
<th>Cat. №</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>HC-T2-T</td>
<td>Thrombodynamics Analyser System T2-T (fibrin and thrombin registration)</td>
</tr>
<tr>
<td>HC-T2-F</td>
<td>Thrombodynamics Analyser System T2-F (fibrin registration only)</td>
</tr>
<tr>
<td>HC-TDX-10</td>
<td>Reagents kit for 10 fibrin measurements</td>
</tr>
<tr>
<td>HC-PLS-10</td>
<td>Reagents kit for 10 fibrin and thrombin measurements</td>
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</tbody>
</table>

### Literature


http://5-diagnostics.com

www.hemacore.com/en