

# 5 year quality of life data after EKOS<sup>®</sup> treatment in acute DVT

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# LINC 2016

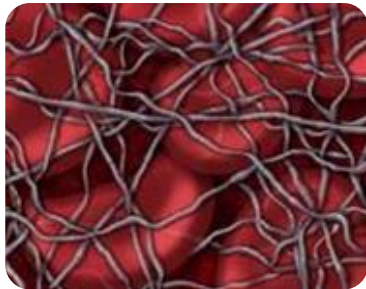
<b>Disclosure of speaker's interests</b>	
<b>conflict of interest</b>	<b>See below</b>
<b>Potentially relevant company relationships in connection with event <sup>1</sup></b>	<b>BTG</b>
<ul style="list-style-type: none"> <li>• Sponsorship or research funding<sup>2</sup></li> <li>• Fee or other (financial) payment<sup>3</sup></li> <li>• Shareholder<sup>4</sup></li> <li>• Other relationship, i.e. ...<sup>5</sup></li> </ul>	<b>Cook<sup>2</sup></b> <b>ab medica<sup>2,3</sup></b>

- Reason for early clot removal:
  - Relief of acute symptoms
    - Swelling
    - Pain
    - Edema
  - Risk reduction for postthrombotic syndrome (PTS)
    - residual venous obstruction
    - residual thrombus
    - valve incompetence

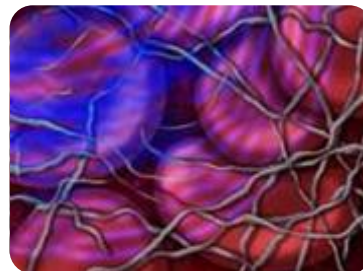


- New endovascular techniques are becoming more popular
  - US 2013: 300.000 catheter-directed thrombolysis for DVT
  - New pharmacomechanical devices were developed
- Most experience derives from small case series addressing patency
- CaVent-trial is the only PRT who presented long-term results

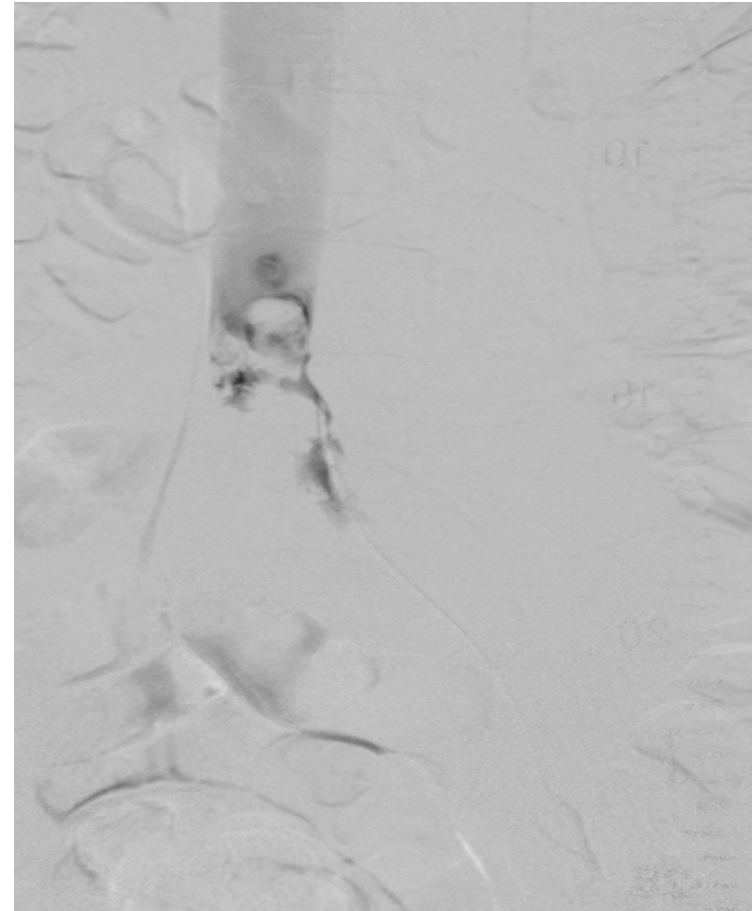
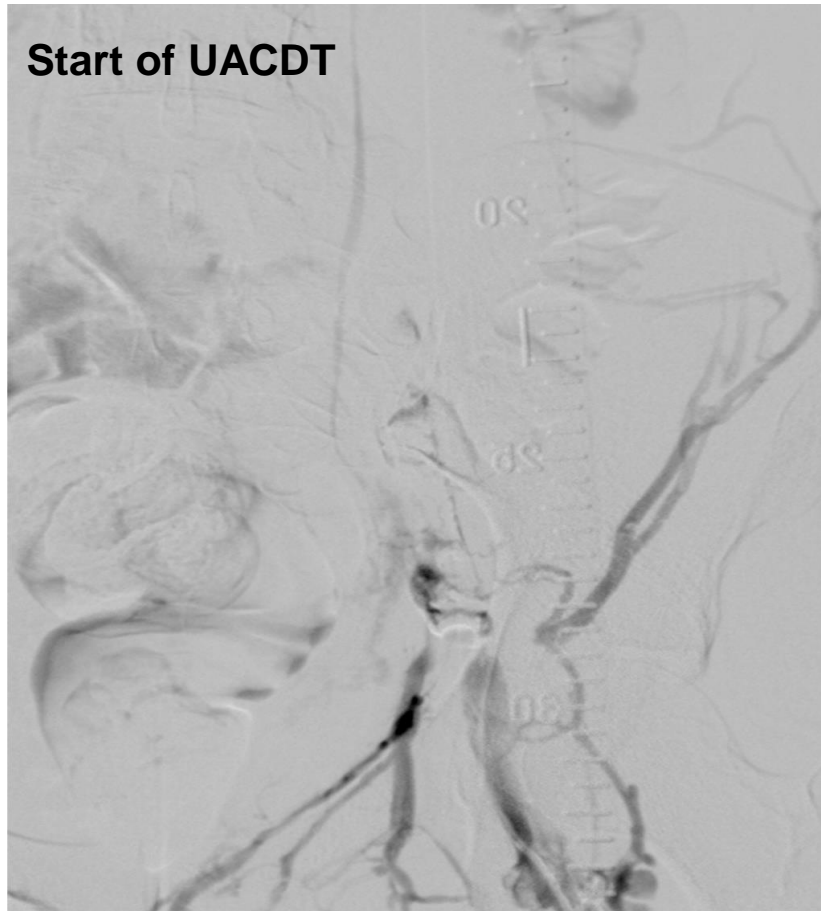
- EkoSonic® Endovascular System: ultrasound-accelerated catheter-directed thrombolysis (UACDT)
  - Mechanical: high frequency, low energy ultrasound



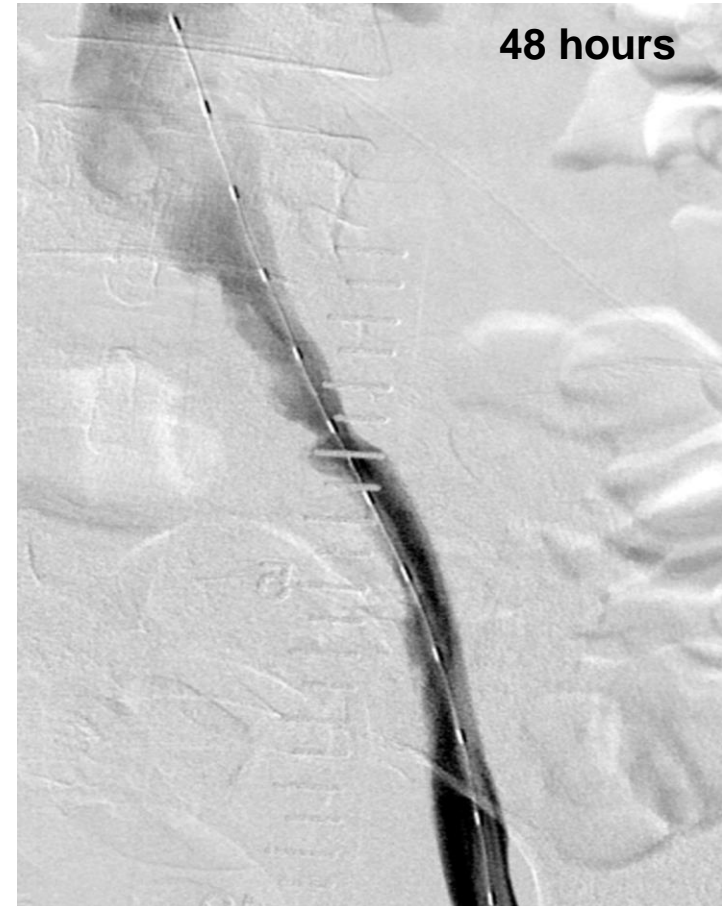
- Drug: recombinant tissue plasminogen activator
  - Bolus 5mg, 1mg per hour
  - Heparin PTT 40-60 seconds



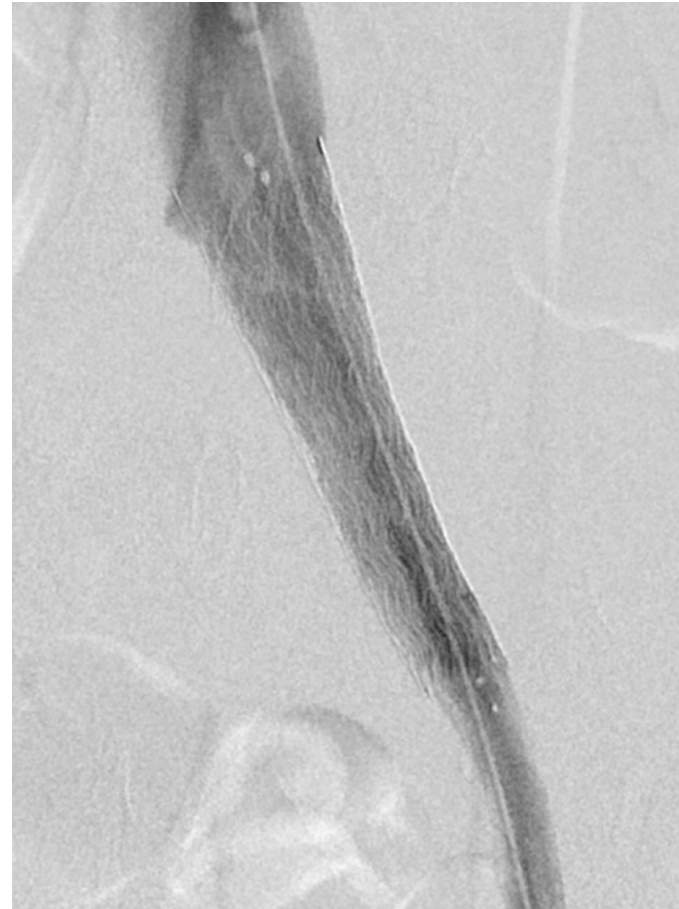
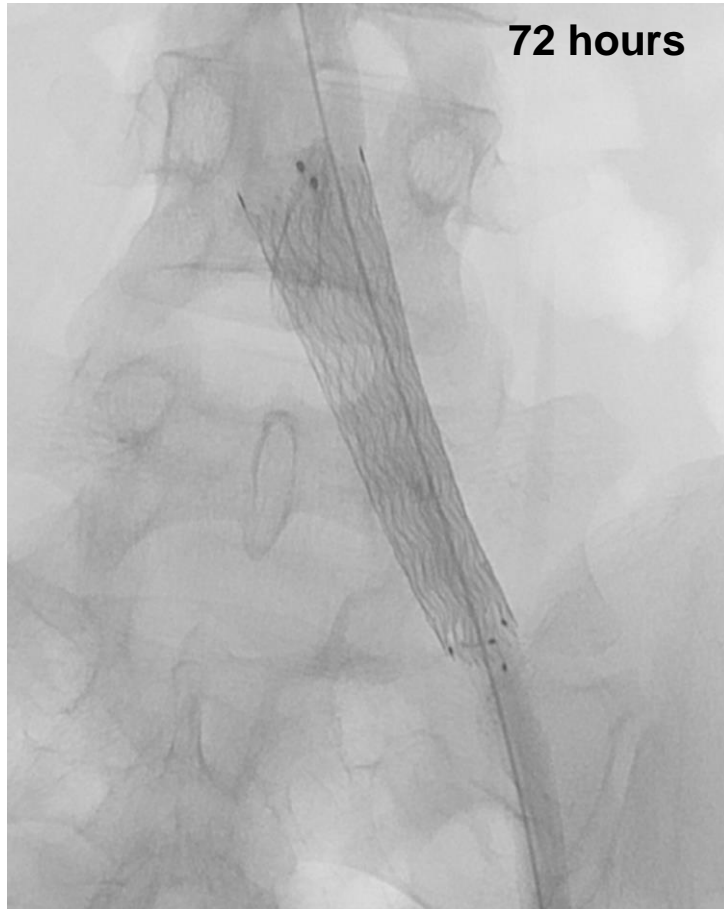
- Angiography



- Angiography



- Angiography





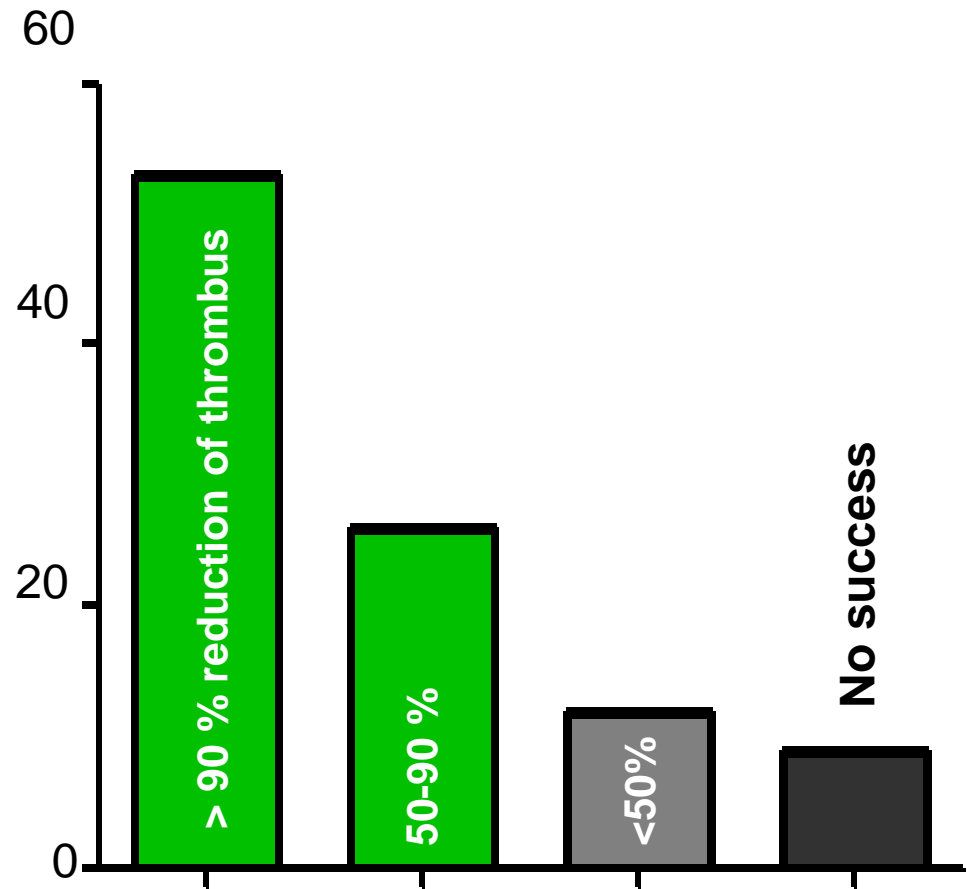
- Follow-up:
  - Clinical examination
  - Ultrasound
  - Assessment of PTS: Villalta-Score (score 0-33)
  - Quality of life:
    - Generic measures using ShortForm Health Survey-36 (SF36)
      - Physical Component Summary (PCS)
      - Mental Component Summary (MCS)
    - Disease-specific measures using Venous Insufficiency Epidemiological and Economic Study (Veines)-Qol/Sym
      - Veines-Qol 26-items Questionnaire
      - Veines Sym subscale of the Veines-Qol measuring venous symptoms

## Our experience

- Since 2009: 40 patients with iliofemoral DVT (female: 21), 51 legs
- Recurrent DVT: 17/40
- Ilio-femoral DVT with involvement of the inferior caval vein: 18/40
  
- Treatment time  $79 \pm 31$  h (min 24 hours; max 120 hours)
- rtPA dosage  $80.2 \pm 35.9$  mg

## Primary Patency (n=51):

- >90% reduction of thrombus : 27
- 50-90% reduction of thrombus: 13
- < 50 % reduction of thrombus: 6
- no success: 5
  
- success: 79% (40/51)



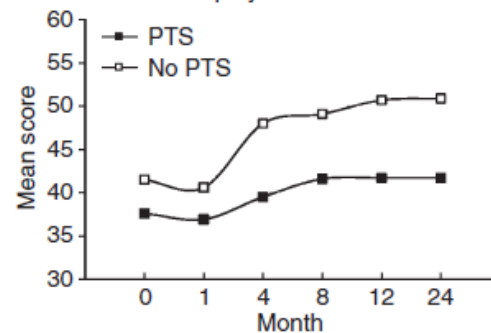
## ORIGINAL ARTICLE

## Determinants of health-related quality of life during the 2 years following deep vein thrombosis

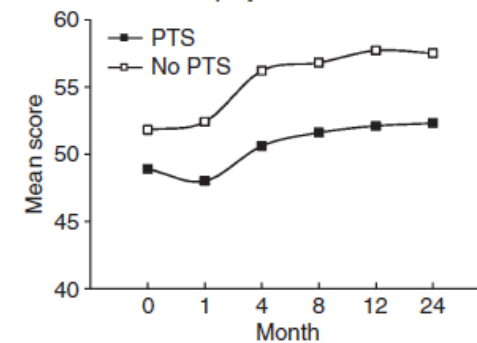
S. R. KAHN,\*† H. SHBAKLO,\* D. L. LAMPING,‡ C. A. HOLCROFT,\* I. SHRIER,\*† M. J. MIRON,§  
 A. ROUSSIN,§ S. DESMARAIS,¶ F. JOYAL,§ J. KASSIS,§ S. SOLYMOSS,† L. DESJARDINS,\*\*¹  
 M. JOHRIS and J. S. GINSBERG††

n=387 (male=197)

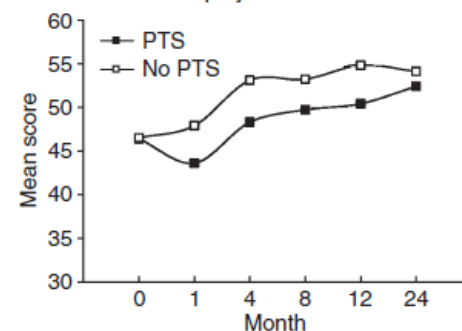
**A** Mean SF-36 PCS scores during study follow-up by PTS status



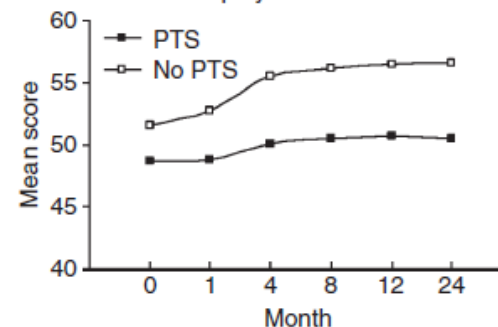
**C** Mean VEINES-QOL scores during study follow-up by PTS status



**B** Mean SF-36 MCS scores during study follow-up by PTS status

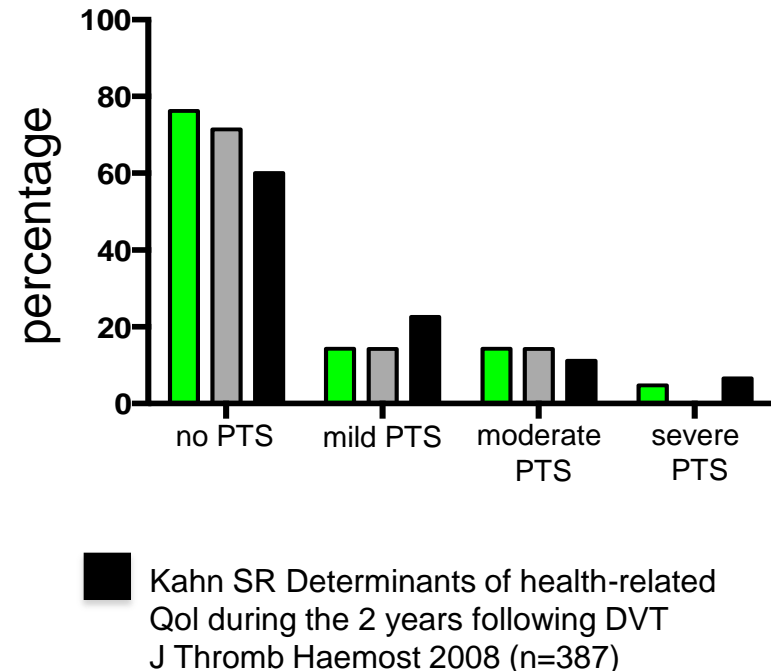
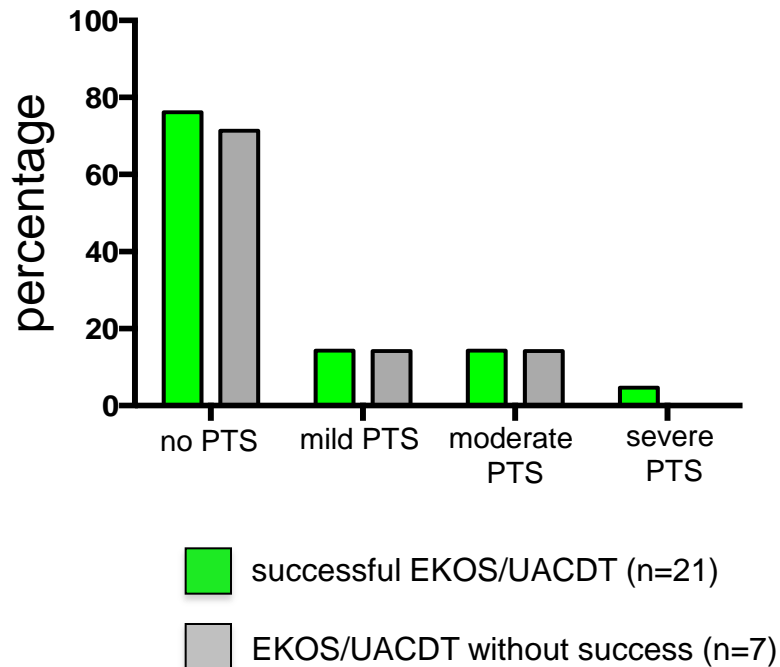


**D** Mean VEINES-Sym scores during study follow-up by PTS status

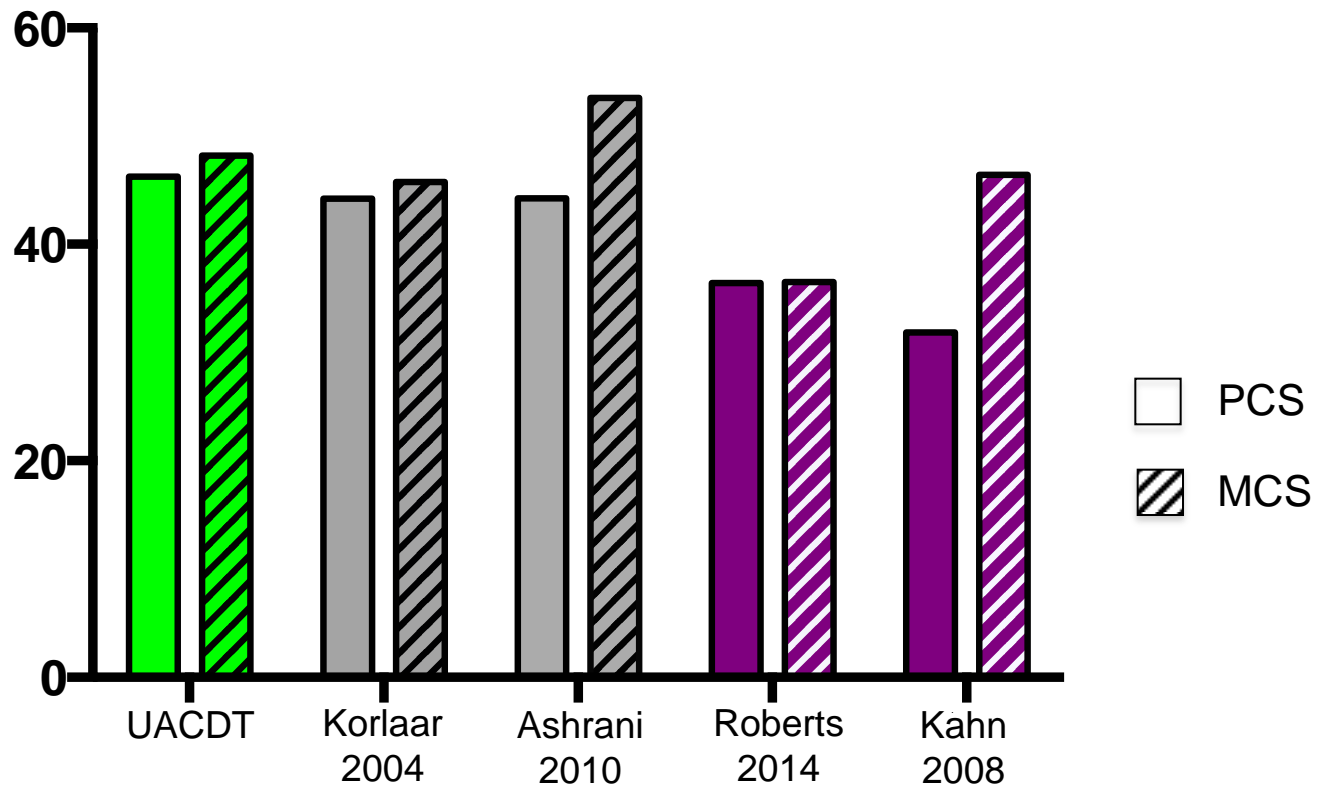


## Follow-up Villalta-Score:

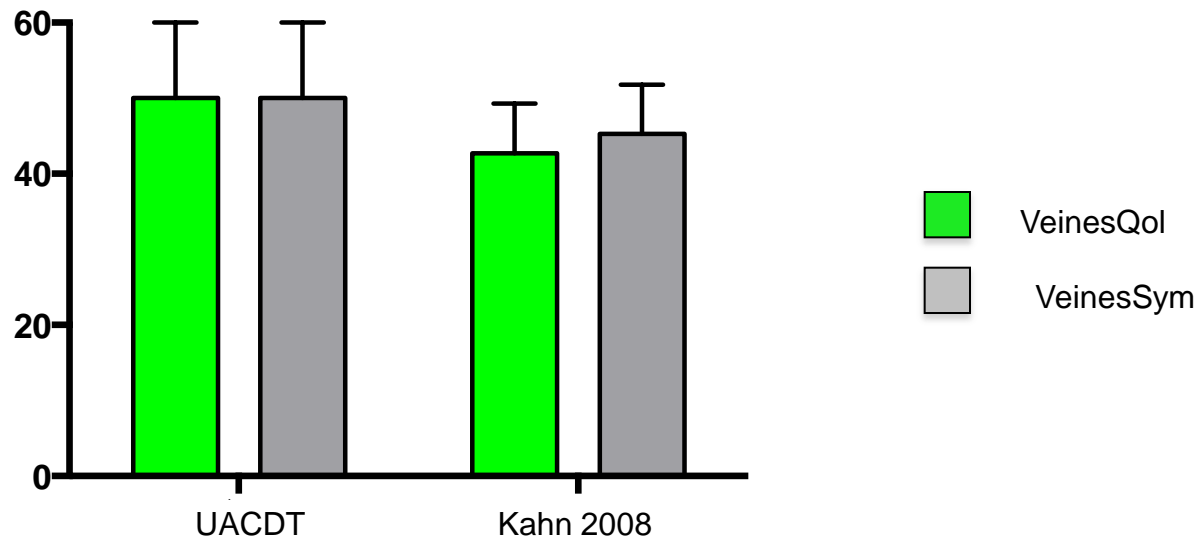
- low incidence of severe PTS after CDT



## Quality of life I: SF36 PCS and MCS



## Quality of life II VeinesSym/QoI



- Follow-up shows improved patency after EKOS/UACDT in comparison to conservative treatment
- Low incidence of complications
- Improved Qol after EKOS/UACDT in comparison to the literature
- We need (more) results of prospective randomized trials



- Thank you for attention!

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