

Regulatory Issues for PAD Devices

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Disclosure Statement of Financial Interest

I, (Koji Ikeda) DO NOT have a financial interest/arrangement or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of this presentation.



Current Situation of PAD Treatments in Japan

- SFA

- Increasing number of patients
- Progressive disease, Poor prognosis
- Intravascular treatment: Balloon angioplasty (SFA stent is still not approved in Japan)

- BTK

- Increasing number of patients
- Progressive disease, Poor prognosis
- Intravascular treatment: Balloon angioplasty

There is an *urgent need* of intravascular devices for PAD.

Points of Designing Trial for PAD

| | SFA | BTK |
|-----------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Targeted Pts of Intravascular Treatment | TASK II, Type A and B Fontaine II - | Stenosis length ? *Criteria is not clear |
| Objective of Therapy | Remission of intermittent claudication | Rutherford 4: pain relief Rutherford 5 \leq : ulcer healing, avoidance of amputation |
| Control in Clinical Trial | Balloon angioplasty | Balloon angioplasty |
| Primary Endpoint | Primary patency | Clinical endpoint? |
| Evidence for SOC in Japan | Balloon angioplasty: insufficient Bypass surgery: insufficient | Balloon angioplasty: insufficient Bypass surgery: insufficient |

Relatively-simple in SFA, but many obstacles for BTK

Issues in Reviewing Other Countries' Trials for SFA Region

- **Insufficient evidence of SOC as historical control**
 - **Obscureness in objective of therapy**
- **Extrapolability of other countries' trials**
 - complexity of clinical state
 - lifestyle (sitting position, total walking time, etc.)
 - care setting (drugs, devices, SOC)
 - influencing factors to efficacy and safety are not clear

Limitation of extrapolability

→ Japanese clinical data is required

Points of Designing Trials for BTK

- Targeted Patients
 - High population of hemodialysis (HD) patients
 - High population of elderly patients
 - Criteria for amputation is different: Japanese population includes patients who are applied amputation
 - Rutherford 4 and 5+ can be evaluated by the same endpoints?
- Patency can be a surrogate endpoint?
 - Patency may not reflect AFS improvement
 - What is a suitable endpoint?

Composite endpoint is required?

Points of Designing Trials for BTK

- Insufficient evidence of Japanese population with SOC
(both in distal bypass&intravascular treatment)
- Difference in targeted patient population
- Need to re-examine endpoints
- Limitation of extrapolability
 - different patient population
 - care setting (drugs, devices, SOC)

Limitation of extrapolability

→ *Japanese clinical data is required*

Summary and Future Plan

- Japanese clinical results is being accumulated from clinical trails for SFA devices
 - Raising the possibility of standardization with trials in other countries
- Clear distinction with targeted patient population. Need to re-examine endpoints.
 - Need more discussion in *expert meetings with industry/academia/government with transparency*
 - To facilitate *mutual understanding of the distinction* and stimulate developments are important

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Thank you!