

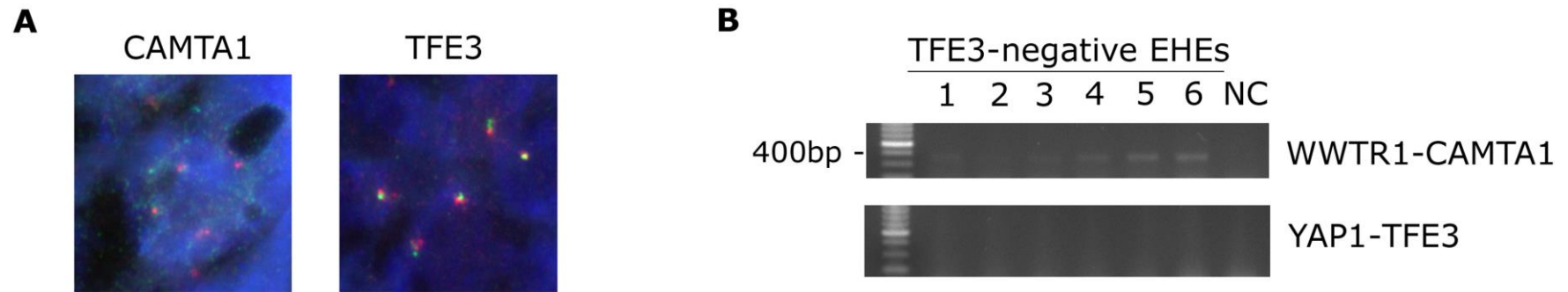
Epithelioid hemangioendotheliomas with *TFE3* gene translocations are compossible with *CAMTA1* gene rearrangements

Supplementary Material

Supplementary Data 1. Histologic findings of 18 EHEs

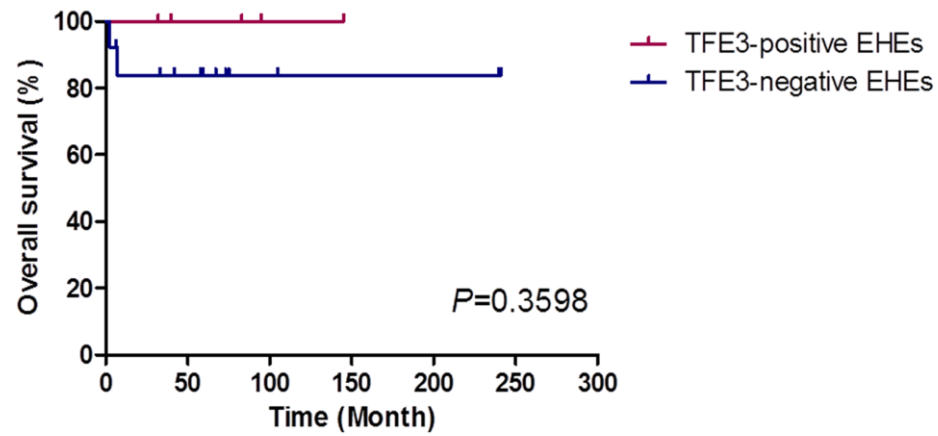
| Case | Histologic features | | | | | | | |
|------|-------------------------|---------------------|------------------------------|------------------|--------------------|------------------------|-------------------|----------------|
| | Cellular feature | Cytoplasmic feature | Nuclear atypia | Amount of stroma | Hypercellular area | Blood vessel formation | Mitosis (/10HPFs) | Tumor necrosis |
| 1 | Spindle and epithelioid | Foamy | Mild | Moderate | Not identified | Moderate | 0 | - |
| 2 | Epithelioid | Eosinophilic | Mild | Moderate | Not identified | Moderate | 0 | - |
| 3 | Epithelioid | Eosinophilic | Moderate | Abundant | Not identified | Moderate | 0 | - |
| 4 | Epithelioid | Eosinophilic | Mild | Abundant | Not identified | Moderate | 0 | - |
| 5 | Epithelioid | Eosinophilic | Mild | Abundant | Not identified | Moderate | 0 | - |
| 6 | Spindle and epithelioid | Foamy | Mild | Moderate | Present | Well | 2 | - |
| 7 | Spindle and epithelioid | Eosinophilic | Moderate to focal high grade | Abundant | Present | Well | 0 | - |
| 8 | Epithelioid | Eosinophilic | Moderate | Moderate | Present | Well | 1 | - |
| 9 | Epithelioid | Eosinophilic | Moderate | Abundant | Not identified | Moderate | 1 | + |
| 10 | Epithelioid | Foamy | Mild | Abundant | Not identified | Moderate | 0 | + |
| 11 | Epithelioid | Eosinophilic | Moderate | Abundant | Not identified | Moderate | 0 | - |
| 12 | Spindle and epithelioid | Eosinophilic | Mild | Abundant | Not identified | Moderate | 1 | - |
| 13 | Epithelioid | Eosinophilic | Moderate | Abundant | Not identified | Moderate | 1 | + |

| | | | | | | | | |
|----|-------------------------|--------------|------------------------------|----------|----------------|----------|---|---|
| 14 | Epithelioid | Eosinophilic | Moderate | Abundant | Not identified | Moderate | 1 | + |
| 15 | Spindle and epithelioid | Foamy | Mild | Abundant | Not identified | Moderate | 0 | - |
| 16 | Spindle and epithelioid | Foamy | Moderate | Moderate | Present | Moderate | 1 | - |
| 17 | Epithelioid | Foamy | Moderate to focal high grade | Moderate | Present | Moderate | 1 | + |
| 18 | Epithelioid | Eosinophilic | Moderate | Abundant | Not identified | Moderate | 0 | - |



Supplementary Data 2. CAMTA1 translocation in EHEs without TFE3 rearrangements.

A. FISH assay results for TFE3 and CAMTA1 break-apart showing separated green and orange signals only within the CAMTA1 gene but not the TFE3 gene (1,000× magnification). B. RT-PCR assay results identifying the presence of fusion transcripts of WWTR1-CAMTA1 genes but not YAP1-TFE3 genes. N/C, negative control.



Supplementary Data 3. Comparison of the overall survival between patients with TFE3-positive and TFE3-negative EHEs by Kaplan-Meier analysis