## Fatty Acid Binding Proteins and Peribronchial Angiogenesis

## in Bronchopulmonary Dysplasia

Elisa Ghelfi, Cagatay Karaaslan, Sara Berkelhamer, Serra Akar, Harry Kozakewich, and Sule

Cataltepe

**Online data supplement** 

| Gene              | Primer Sequence                |
|-------------------|--------------------------------|
| FABP4 (F)         | 5'- GCCAGGAATTTGACGAAGTCAC -3' |
| FABP4 (R)         | 5'- TTCTGCACATGTACCAGGACAC -3' |
| FABP5 (F)         | 5'- AGCAGCTGGAAGGAAGATGG -3'   |
| FABP5 (R)         | 5'- ACAATCTGGCTTGGCCATTG -3'   |
| cyclophilin A (F) | 5'- TTCATCTGCACTGCCAAGACTG -3' |
| cyclophilin A (R) | 5'- GGCCTCCACAATATTCATGCCT -3' |

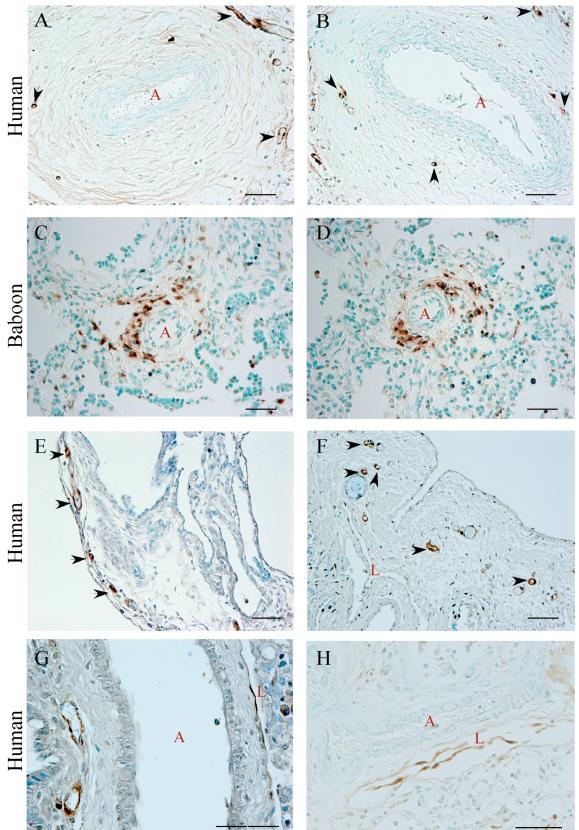
 Table 1E.
 Real-time PCR primer sequences

#### **Figure Legend for Online Supplement**

**Figure E1.** FABP4 expression in paraffin-embedded human and baboon BPD samples. Immunohistochemistry demonstrates FABP4 expression in vasa vasorum ECs (black arrows) in the adventitia of pulmonary artery (artery marked with red "A") in a human BPD sample that also has changes consistent with pulmonary hypertension (A and B). FABP4 is also expressed in macrophage-like mononuclear cells in the pulmonary arterial wall in a baboon BPD sample (C and D). Notably, there is lack of FABP4 staining in arterial endothelial cells in both baboon and human samples. FABP4 expression is also observed in some pleural vascular endothelial cells in two different cases of human BPD (black arrows, E and F), but not in lymphatic endothelial cells (F, lymphatic marked with red "L"). In other human BPD samples shown in G and H, FABP4 is detected in lymphatic ECs. Scale bar, 50 µm.

**Figure E2.** Double immunofluorescence analysis for FABP4 and other vascular (CD31,  $\alpha$ SMA) and macrophage (CD163) markers on paraffin-embedded baboon and human BPD samples. Representative images are shown. CD31 and FABP4 are co-localized in ECs of peribronchial small- and mid-sized vessels in peribronchial localization (BL, bronchial lumen) in a baboon BPD sample (first row).  $\alpha$ SMA-positive cells surround some, but not all of the FABP4-positive vessels in peribronchial (second row) and perivascular (third row; v, vascular lumen) areas in BPD samples. FABP4 is co-localized with CD163 in the majority, but not all of alveolar macrophages (fourth row). White arrows indicate CD163-positive and FABP4-negative macrophages. Scale bar 50  $\mu$ m.

# FIGURE E1



# FIGURE E2

