



Figure S1 Relative to myometrium T2 and ADC, myometrium tumors with shorter T2 are associated with higher ADC (blue oval and red arrow 1), myometrium tumors with longer T2 are associated with lower ADC (blue oval and red arrow 2), and myometrium tumors with much longer T2 are associated with higher ADC (blue oval and red arrow 3). Skeletal muscles (dark red label) have a T2 of around 32 ms (3T) and ADC of $1.6 \times 10^{-3} \text{ mm}^2/\text{s}$ (1,2). Uterine myometrium also has a short T2. McCarthy *et al.* (3) described myometrium had a T2 of 63 at 1.5T (inner myometrium T2: 45 ms). Ghosh *et al.* (4) described that, at 1.5T, T2 were 52.30 to 58.5 ms and 57.53 to 61.23 ms for superficial and deep myometrium respectively. Note that T2 is shorter at 3T than at 1.5T, and can be difficult to measure consistently. Zhu *et al.* (5) described that their uterine myoma had a T2 of 47.9 ms at 1.5T and 42.8 ms at 3T. Kido *et al.* (6) reported myometrium also has an ADC of $1.6 \times 10^{-3} \text{ mm}^2/\text{s}$ during non-menstrual phase (1.5T, measured with b value of 0, 50, 1,000 s/mm^2), such being similar to that of skeletal muscles. Taking these together, the T2-ADC relationship for uterine myometrium (red circle label) will be at the first phase with T2 shorter than 60 ms. Accordingly (7-10), in the analyses of DeMulder *et al.*, Bura *et al.*, and Barral *et al.*, myometrium tumors with shorter T2 (i.e., hypointense to myometrium) are associated with higher ADC (not restricted on ADC map), myometrium tumors with longer T2 (i.e., hyperintense to myometrium) are associated with lower ADC (restricted on ADC map). Cystic degenerated and myxoid degenerated tumors have very long T2 (i.e., highly hyperintense) and higher ADC (not restricted on ADC map). STUMP and lipoleiomyoma have heterogeneous T2-weighted signal and undetermined ADC. These results highly support the concept shown with *Figure 1* in the main text. The frame of this supplementary figure is based on *Figure 1* in the main text (meaning of the labels also see *Figure 1*). Data in this Figure are summarized from *Tab. 2* by DeMulder *et al.* (8), *Tab. 1* by Bura *et al.* (9), and *Tab. 1* by Barral *et al.* (10). ADC, apparent diffusion coefficient; LM, leiomyoma; STUMP, smooth muscle tumors of uncertain malignant potential.

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