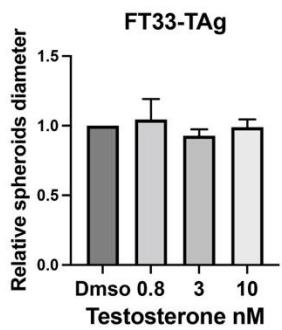
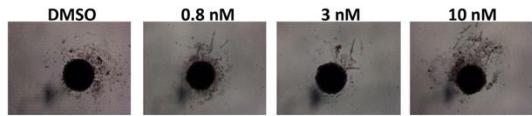
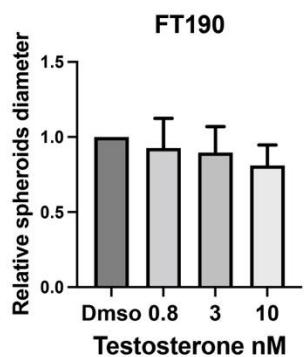
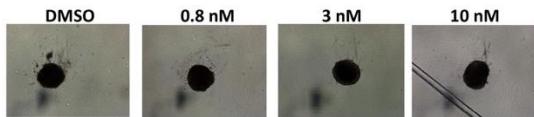
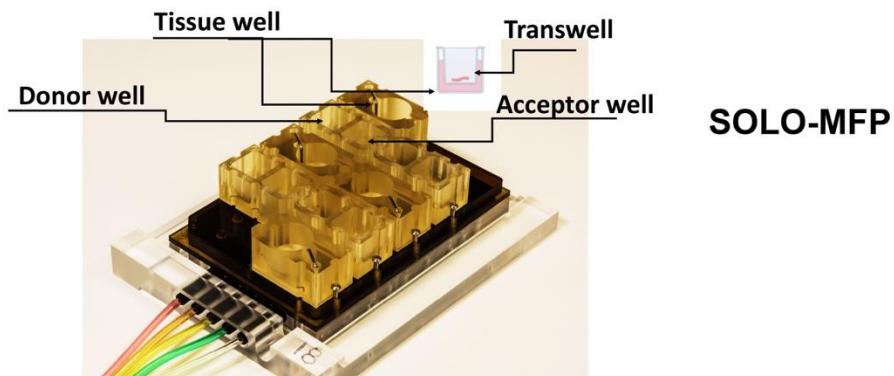
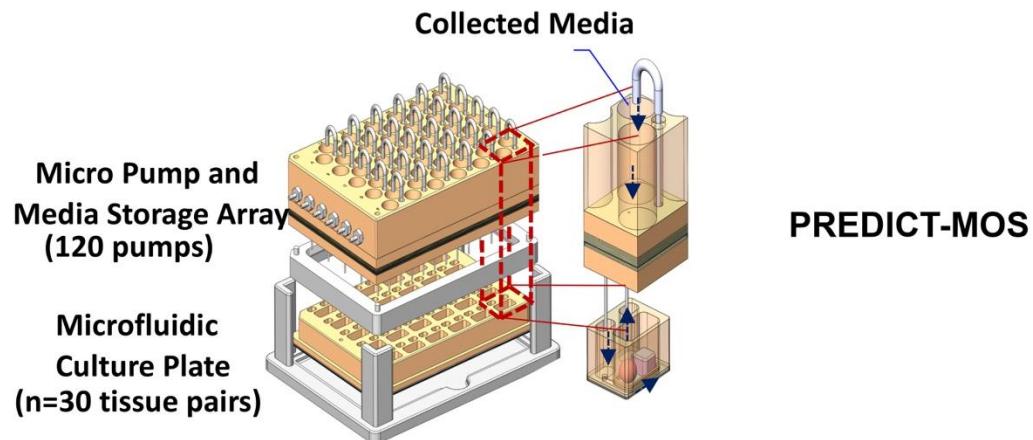


**Figure S1.** Pathway analysis of genes regulated by testosterone. A-B) Upregulated genes. B-C) Downregulated genes.

**A****B**

**Figure S2.** Effect of testosterone on spheroids size. A) FT33-TAg cells were seeded in ULA plates and grown for 10 days before taking pictures. Three independent experiments were performed and quantified using Image J to measure the diameter. One-Way Anova was performed with no significant differences. B) Same as A conducted in FT190 cells.



**Figure S3.** PTEDICT-MOS vs. SOLO microfluidic platform. Schematic of the PREDICT-MOS and the SOLO-MFP systems. Top panel shows the novel PREDICT system with the 30-tissue-well format. Bottom panel shows the older system SOLO-MFP with limited number of tissue-wells (about 4).

Table S1

Primers	forward	reverse
<i>PIKB</i>	ATCCAGAGTTCAGCTGCCA	CTCTTTGCATCTCCTTCAC
<i>STEAP4v1</i>	GCTTGGTAGCTCTGGGATT	TTGCCTGGTAACGGTTAAG
<i>STEAP4v3</i>	TCCAGTCAAACCTGGGTTATT	GATTGAAGGGCTGAGGAATCT
<i>ZBTB16</i>	TGTTGAGATCCTCTCCACCGC	TCTCCAGCATCTCAGGCACTGT
<i>KIF5C</i>	GCCGAATGCAGCATCAA	TTCCCTTGCCCCATCAC
<i>TP53</i>	AGCCAAGTCTGTGACTTGCA	AACCTCCGTATGTGCTGT
<i>P21</i>	AAATCGTCCAGCGACCTTCCTCAT	TCTGACTCCTGTTCCGCTGCTAA
<i>CD82</i>	ATCTCTGCTCTGCAAACCTCCTCC	GAAGCCCCATGAGCATAGTG
<i>PAX2</i>	TGTGTCAGCAAATCCTGG	CGGGTTCTGTCGTTGTATT
<i>LAMA2</i>	AGTCCTCAGGTGGAAGATAG	ACATGACAGTGGAGATGTTG
<i>LGR6</i>	ACGGCTTACCTGGACCTCA	GCTTGCCTGGGATGTGTGA
<i>WNT4</i>	GAGCAACTGGCTGTACCTGG	TTCTCCTTCAGTGCCTGACC
<i>18S</i>	GCTTGCCTTGATTAAGTCCC	GCCTCACTAAACCATCCAATC

Table S2

Antibodies	Company	Catalog#
LGR6	ProteinTech	17658-I-AP
WNT4	Abcam	ab91226