## Supplementary Tables

**Table S1. Antibodies**

| Antibody | Source | Identifier |
|---|---|---|
| AR | Cell Signaling Technology | 5153S |
| β-actin | Servicebio | GB12001 |
| CYP11A1 | Cell Signaling Technology | 12491 |
| CYP17A1 | Santa Cruz Biotechnology | sc-46081 |
| GAPDH | Cell Signaling | 2118 |
| β-actin | Cell Signaling Technology | 4967 |
| SRD5A2 | ABCAM | ab101896 |
| NRG1 | Santa | SC348 |
| ABCB11 | Sigma | MABS1193 |
| BIRC3 | Sigma | SAB1409216 |
| FGF2 | Sigma | SAB5700986 |
| FOXO1 | Sigma | SAB3500507 |
| Tubulin | thermofisher | DM1A |
| Sirt1 | Sigma | SAB5700048 |

## Supplementary Figures

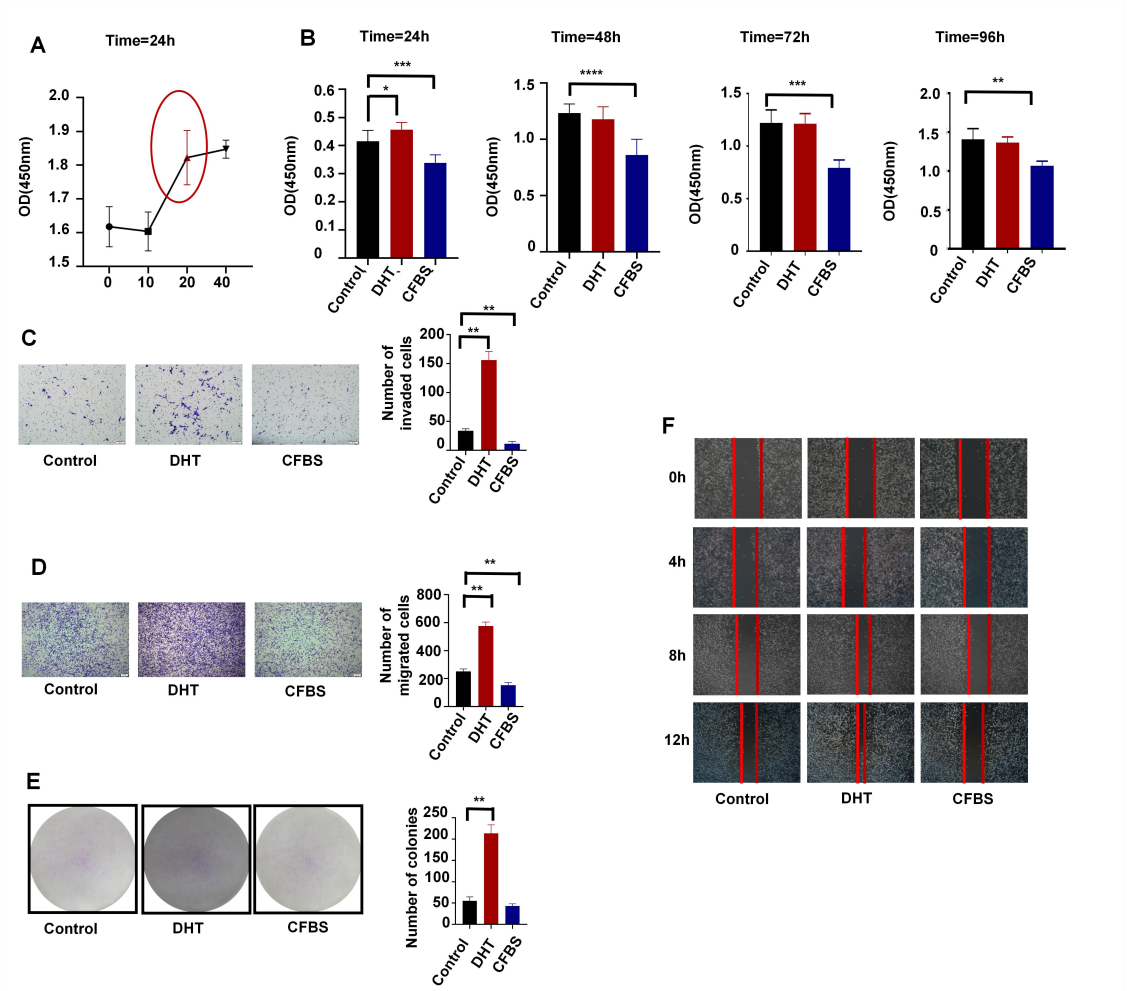


**Figure S1 High levels of androgen promote the proliferation, invasion, migration of U87 cells**. (A) The OD450 values of U87 cell cells treated with different concentrations of DHT for 24 hours. (B) The effects of DHT and CFBS on U87 cell viability at 24, 48, 72, and 96 h. (C) The effects of DHT and CFBS treatment on cell migration. (D) The effects of DHT and CFBS treatment for 12h on cell invasion. (E) The effects of DHT and CFBS treatment for 7 days on cell colony formation. (F) The effects of DHT and CFBS treatment on cell migration by wound healing assay. **P < 0.01, ***P＜0.001, ****P＜0.0001.

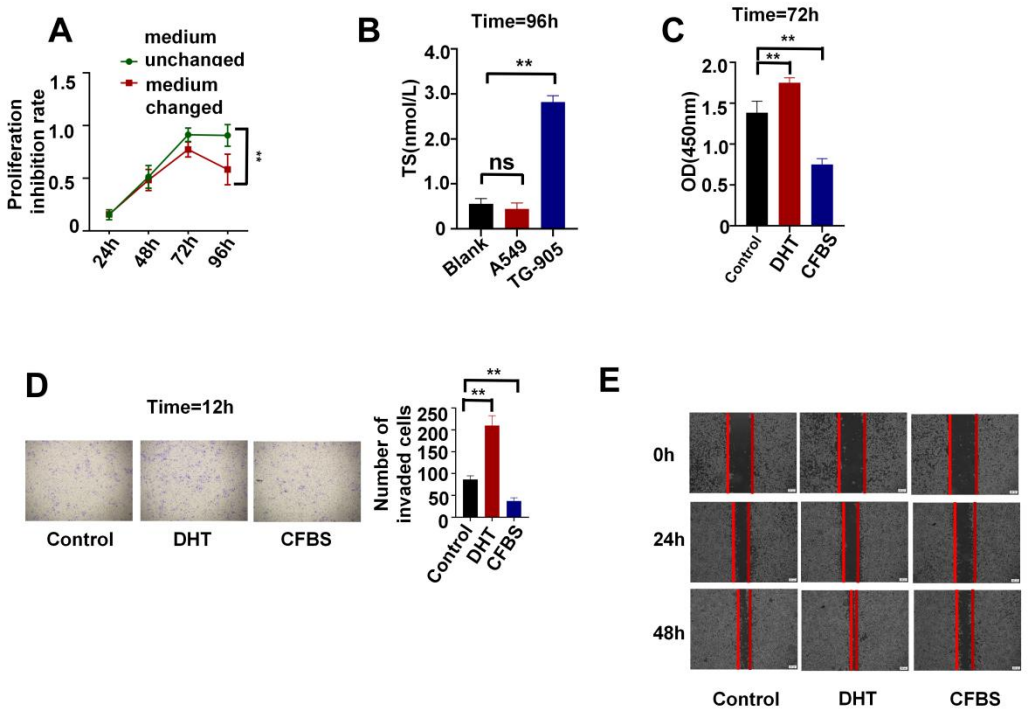


**Figure 2S High levels of androgen promote the proliferation, invasion, migration of GBM (TG-905) cells.** (A) Proliferation inhibition curve of TG-905 cells under charcoal-stripped fetal bovine serum(CFBS) culture (24h medium change vs continuous medium retention , n=3). (B) Androgen concentration in a blank control medium , the culture medium of A549(negative control) and TG-905 cells cultured for 96h without androgen (continuous medium retention, n=3). (C) The OD450 values of TG-905 cell cells treated with different concentrations of DHT for 72 hours. (D) The effects of DHT and CFBS treatment for 12h on cell invasion(n=3). (E) The effects of DHT and CFBS treatment on cell migration by wound healing assay(n=3), scale bars=200μm. **P＜0.01.