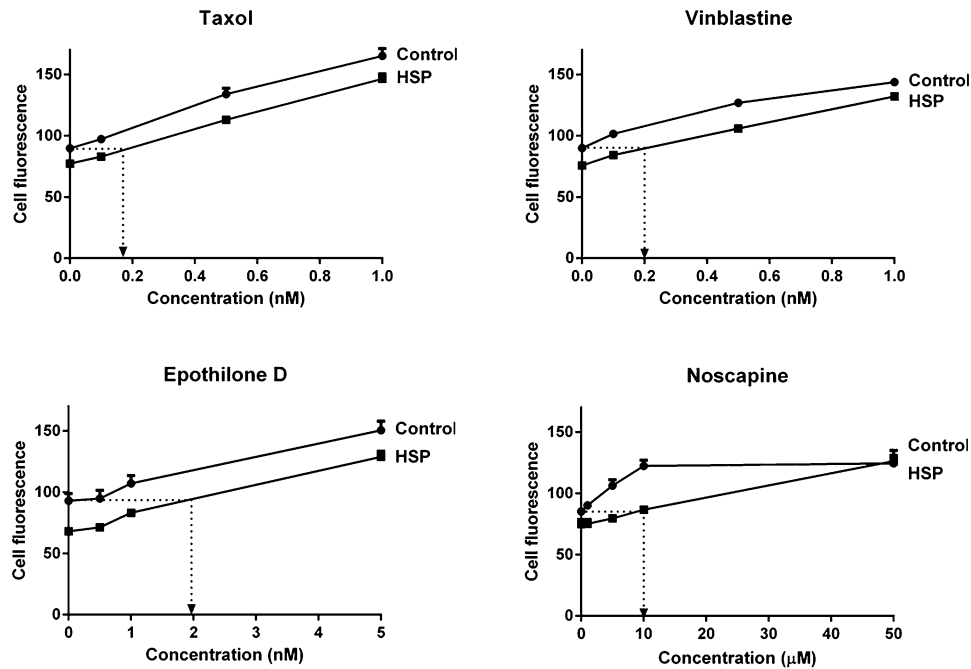
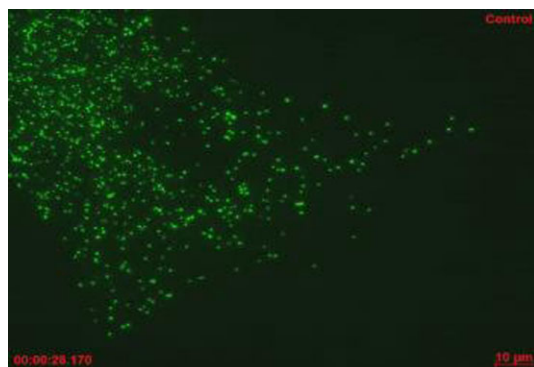


## Supplementary Material

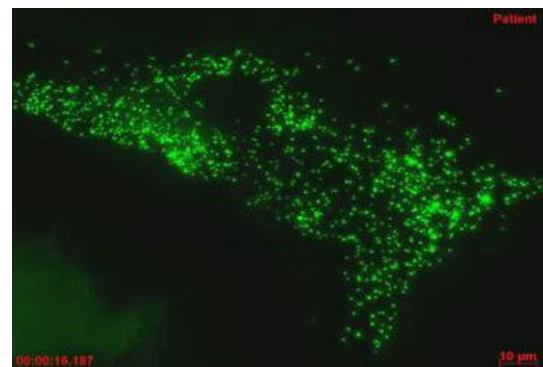
Yongjun Fan et al. doi: 10.1242/bio.20147641



**Fig. S1.** All tubulin-binding drugs increased acetylated  $\alpha$ -tubulin in patient-derived and control-derived cells. Drug doses are indicated that increased acetylated  $\alpha$ -tubulin in patient-derived cell lines to untreated control-derived cell levels (dashed lines).



**Movie 1.** Representative time-lapse movie showing peroxisomes in a control-derived ONS cell. Example of peroxisomes moving within cells. Compressing the images into this movie format severely reduces image quality. Peroxisomes are green dots. Most show vibratory, Brownian-like motion while some show bursts of rapid, saltatory microtubule-based movement. The movie was captured for duration of 2 minutes at 2 second intervals.



**Movie 2.** Representative time-lapse movie showing peroxisomes in a HSP patient-derived ONS cell. Example of peroxisomes moving within cells. Compressing the images into this movie format severely reduces image quality. Peroxisomes are green dots. Most show vibratory, Brownian-like motion while some show bursts of rapid, saltatory microtubule-based movement. The movie was captured for duration of 2 minutes at 2 second intervals.