Introduction & Objectives: In 2020, the COVID-19 pandemic brought innumerable challenges to healthcare systems, with reallocation of professionals and suspension of normal activity. This led to a more difficult patient access to primary care, with postponed routine examinations and delayed referrals to specialized consultations. We are now experiencing the results of such delays, with patients arriving later at specialized outpatient appointments. Our objectives were to compare pathological staging patterns of prostate cancer between pre and post-COVID-19 years.

Materials & Methods: At a tertiary center, we gathered all pathological data from prostate biopsies (PB) and radical prostatectomy (RP) from 01-01-2019 to 30-06-2022, and compared pathological specimens between 2019 and post-COVID-19 years (2021 and 2022).

Results: We collected data from 850 PB and 401 RP. During the first pandemic year (2020), we observed a 34.5% and 24.4% reduction in PB and RP (192 PB in 2020 vs 293 in 2019; 96 RP in 2020 vs 127 in 2019), respectively. In 2021 and first semester of 2022, the number of PB and RP returned to pre-pandemic values. In post-pandemic years (2021 and 2022) (PPY) PB resulted in less ISUP1 tumors (20.6% in PPY vs 26.62% in 2019) and more poorly differentiated tumors (21.6% ISUP³4 in PPY vs 15.7% in 2019), with a 75% increase in cribriform pattern detection. Regarding RP specimens, we identified a 150% increase in high-grade tumors (ISUP³4: 9.9% in PPY vs 3.9% in 2019) and 66% increase in extraprostatic extension (54.3% in PPY vs 36.2% in 2019). Nodal involvement was detected in 4.6% (n=15) in PPY compared to 3.9% (n=5) in 2019.

Conclusions: We are currently observing a change in prostate cancer disease characteristics compared to pre-pandemic years, with patients arriving with higher-grade tumors and more locally advanced features.