# Genomic alterations of Tenascin C in highly aggressive prostate cancer: a meta-analysis - Mishra et al 

## Supplementary Figures

Tumor Samples with sequencing and CNA data ( 77 patients / 107 samples) Altered in 57 ( $74 \%$ ) of 77 sequenced cases/patients (77 total)


Supplementary Figure 1: TNC alterations in NEPC. OncoPrint representing the query for TNC along with AR, ERG and MYC among the neuroendocrine prostate cancer dataset ( $N=104$ ). Number of samples with sequencing and CAN data were $N=77$. Each row of the oncoprint represents the same set of patients for each of the queried gene, alteration frequency for the gene represented in percentage. Each rectangle box in the figure represents a patient sample/case. Genetic alterations are color coded: Amplification, red; Missense mutations, green; deep deletion, blue; No alterations, grey.

|  |  | $\begin{aligned} & \text { TML } \\ & \text { Nh } \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{sm} \\ & \mathrm{ma} \end{aligned}$ | $\begin{aligned} & \text { an } \\ & \mathrm{Na} \end{aligned}$ | $\begin{aligned} & \text { This } \\ & \text { vA } \end{aligned}$ | $\begin{aligned} & \text { moter } \\ & \text { ma } \end{aligned}$ | SDICA <br> NA | $\begin{aligned} & \text { Notrote } \\ & \text { NA } \end{aligned}$ | $\begin{array}{ll} \text { chowl } \\ \mathrm{Na} \end{array}$ | $\begin{aligned} & \mathrm{CKCDP} \\ & \mathrm{NA} \end{aligned}$ | $\begin{aligned} & \mathrm{For} \\ & \mathrm{Na} \end{aligned}$ | $\begin{aligned} & \text { sexy } \\ & \text { MA. } \end{aligned}$ | $\begin{array}{ll} \operatorname{son} s^{3} \\ \text { NA } & s \end{array}$ | $\begin{aligned} & \text { S0XR } \\ & \text { NA } \end{aligned}$ | Wifys | $\begin{aligned} & \text { Whtw } \\ & \mathrm{NA} \end{aligned}$ | $\begin{aligned} & \text { Whys } \\ & \text { MA } \end{aligned}$ | $6 \times 15$ $\mathrm{NK}$ | $\begin{aligned} & \text { werks } \\ & \text { MA } \end{aligned}$ | WWuss $\mathrm{N} / \mathrm{A}$ |
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Supplementary Figure 2：mRNA expression correlated to TNC gene alterations in TCGA（top 100 cases with TNC alteration）





Supplementary Figure 3: Correlation analysis of TNC and de-differentiation markers

| Gene | Cytoband | Samples with alteration in TNC altered group | Samples with alteration in unaltered group | Log <br> Ratio | p -Value | $q-$ Value | Tendency |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NOTCH1 | 9 q 34.3 | 22 (84.62\%) | 2 (2.47\%) | 5.1 | 9.71E-17 | 7.22E-15 | Co-occurrence |
| NOTCH3 | 19p13.12 | 16 (61.54\%) | 4 (4.94\%) | 3.64 | $3.81 \mathrm{E}-09$ | $2.99 \mathrm{E}-08$ | Co-occurrence |
| NOTCH2 | 1p12 | 16 (61.54\%) | 5 (6.17\%) | 3.32 | $1.43 \mathrm{E}-08$ | 7.82E-08 | Co-occurrence |
| NOTCH2NLA | 1q21.1 | 17 (65.38\%) | 9 (11.11\%) | 2.56 | $1.65 \mathrm{E}-07$ | 5.18E-07 | Co-occurrence |
| NOTCH4 | 6p21.32 | 11 (42.31\%) | 5 (6.17\%) | 2.78 | 4.96E-05 | 7.29E-05 | Co-occurrence |
| QSOX2 | 9 q 34.3 | 21 (80.77\%) | 2 (2.47\%) | 5.03 | $1.50 \mathrm{E}-15$ | $6.79 \mathrm{E}-14$ | Co-occurrence |
| SOX9 | 17q24.3 | 19 (73.08\%) | 3 (3.70\%) | 4.3 | 1.47E-12 | 3.85E-11 | Co-occurrence |
| SOX14 | $3 q 22.3$ | 17 (65.38\%) | 6 (7.41\%) | 3.14 | 7.37E-09 | 4.57E-08 | Co-occurrence |
| SOX2 | 3q26.33 | 17 (65.38\%) | 7 (8.64\%) | 2.92 | $2.27 \mathrm{E}-08$ | $1.16 \mathrm{E}-07$ | Co-occurrence |
| SOX13 | 1q32.1 | 19 (73.08\%) | 12 (14.81\%) | 2.3 | $6.25 \mathrm{E}-08$ | $2.39 \mathrm{E}-07$ | Co-occurrence |
| SOX3 | Xq27.1 | 18 (69.23\%) | 10 (12.35\%) | 2.49 | $6.92 \mathrm{E}-08$ | 2.54E-07 | Co-occurrence |
| SOX30 | 5q33.3 | 15 (57.69\%) | 5 (6.17\%) | 3.22 | 8.66E-08 | $3.06 \mathrm{E}-07$ | Co-occurrence |
| SOX8 | 16p13.3 | 14 (53.85\%) | 4 (4.94\%) | 3.45 | $1.44 \mathrm{E}-07$ | 4.66E-07 | Co-occurrence |
| QSOX1 | 1q25.2 | 18 (69.23\%) | 11 (13.58\%) | 2.35 | $1.65 \mathrm{E}-07$ | $5.18 \mathrm{E}-07$ | Co-occurrence |
| SOX12 | 20p13 | 15 (57.69\%) | 7 (8.64\%) | 2.74 | $7.40 \mathrm{E}-07$ | $1.90 \mathrm{E}-06$ | Co-occurrence |
| SOX18 | 20q13.33 | 17 (65.38\%) | 11 (13.58\%) | 2.27 | $9.12 \mathrm{E}-07$ | $2.22 \mathrm{E}-06$ | Co-occurrence |
| SOX4 | 6 p 22.3 | 12 (46.15\%) | 4 (4.94\%) | 3.22 | 3.92E-06 | 7.65E-06 | Co-occurrence |
| SOX5 | 12p12.1 | 9 (34.62\%) | 3 (3.70\%) | 3.22 | $1.15 \mathrm{E}-04$ | $1.61 \mathrm{E}-04$ | Co-occurrence |
| SOX6 | 11p15.2 | 8 (30.77\%) | 2 (2.47\%) | 3.64 | 1.51E-04 | $2.05 \mathrm{E}-04$ | Co-occurrence |
| SOX11 | 2p25.2 | 10 (38.46\%) | 6 (7.41\%) | 2.38 | $4.47 \mathrm{E}-04$ | 5.75E-04 | Co-occurrence |
| SOX10 | 22q13.1 | 6 (23.08\%) | 1 (1.23\%) | 4.22 | 7.40E-04 | 8.89E-04 | Co-occurrence |
| SOX21 | 13q32.1 | 7 (26.92\%) | 3 (3.70\%) | 2.86 | $1.75 \mathrm{E}-03$ | $2.05 \mathrm{E}-03$ | Co-occurrence |
| SOX17 | 8q11.23 | 15 (57.69\%) | 20 (24.69\%) | 1.22 | $2.37 \mathrm{E}-03$ | $2.78 \mathrm{E}-03$ | Co-occurrence |
| SOX1 | $13 q 34$ | 8 (30.77\%) | 6 (7.41\%) | 2.05 | 4.91E-03 | 5.52E-03 | Co-occurrence |
| SOX7 | 8p23.1 | 6 (23.08\%) | 3 (3.70\%) | 2.64 | 6.11E-03 | 6.82E-03 | Co-occurrence |
| SOX15 | 17p13.1 | 3 (11.54\%) | 0 (0.00\%) | $>10$ | 0.0131 | 0.0142 | Co-occurrence |
| WNT7A | 3p25.1 | 20 (76.92\%) | 4 (4.94\%) | 3.96 | $7.76 \mathrm{E}-13$ | $2.36 \mathrm{E}-11$ | Co-occurrence |
| WNT5A | 3 p 14.3 | 20 (76.92\%) | 5 (6.17\%) | 3.64 | $3.61 \mathrm{E}-12$ | $9.21 \mathrm{E}-11$ | Co-occurrence |
|  | 17q21.31- |  |  |  |  |  |  |
| WNT3 | q21.32 | 18 (69.23\%) | 3 (3.70\%) | 4.22 | 1.37E-11 | $2.81 \mathrm{E}-10$ | Co-occurrence |
| WNT9B | 17q21.32 | 18 (69.23\%) | 3 (3.70\%) | 4.22 | 1.37E-11 | 2.81E-10 | Co-occurrence |
| WNT3A | 1q42.13 | 18 (69.23\%) | 6 (7.41\%) | 3.22 | $1.05 \mathrm{E}-09$ | $1.14 \mathrm{E}-08$ | Co-occurrence |
| WNT9A | 1q42.13 | 18 (69.23\%) | 6 (7.41\%) | 3.22 | $1.05 \mathrm{E}-09$ | $1.14 \mathrm{E}-08$ | Co-occurrence |
| WNT1 | 12q13.12 | 13 (50.00\%) | 1 (1.23\%) | 5.34 | 7.01E-09 | 4.57E-08 | Co-occurrence |
| WNT10B | 12q13.12 | 13 (50.00\%) | 1 (1.23\%) | 5.34 | 7.01E-09 | 4.57E-08 | Co-occurrence |
| WNT11 | 11q13.5 | 17 (65.38\%) | 6 (7.41\%) | 3.14 | 7.37E-09 | 4.57E-08 | Co-occurrence |
| WNT8A | 5q31.2 | 13 (50.00\%) | 3 (3.70\%) | 3.75 | $2.12 \mathrm{E}-07$ | 6.31E-07 | Co-occurrence |
| WNT2B | 1p13.2 | 10 (38.46\%) | 2 (2.47\%) | 3.96 | 7.20E-06 | $1.29 \mathrm{E}-05$ | Co-occurrence |
| WNT8B | 10q24.31 | 9 (34.62\%) | 2 (2.47\%) | 3.81 | 3.41E-05 | 5.26E-05 | Co-occurrence |
| WNT2 | 7q31.2 | 12 (46.15\%) | 8 (9.88\%) | 2.22 | $1.46 \mathrm{E}-04$ | $2.02 \mathrm{E}-04$ | Co-occurrence |
| WNT4 | 1p36.12 | 5 (19.23\%) | 0 (0.00\%) | $>10$ | $6.19 \mathrm{E}-04$ | $7.75 \mathrm{E}-04$ | Co-occurrence |
| WNT10A | 2q35 | 7 (26.92\%) | 2 (2.47\%) | 3.45 | 6.31E-04 | $7.76 \mathrm{E}-04$ | Co-occurrence |
| WNT6 | 2q35 | 7 (26.92\%) | 2 (2.47\%) | 3.45 | $6.31 \mathrm{E}-04$ | 7.76E-04 | Co-occurrence |


| WNT5B | $12 p 13.33$ | $9(34.62 \%)$ | $5(6.17 \%)$ | 2.49 | $7.37 \mathrm{E}-04$ | $8.89 \mathrm{E}-04$ | Co-occurrence |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| WNT16 | $7 q 31.31$ | $11(42.31 \%)$ | $11(13.58 \%)$ | 1.64 | $2.97 \mathrm{E}-03$ | $3.40 \mathrm{E}-03$ | Co-occurrence |
| WNT7B | $22 q 13.31$ | $3(11.54 \%)$ | $0(0.00 \%)$ | $>10$ | 0.0131 | 0.0142 | Co-occurrence |
| FZD6 | $8 q 22.3$ | $24(92.31 \%)$ | $20(24.69 \%)$ | 1.9 | $6.73 \mathrm{E}-10$ | $8.59 \mathrm{E}-09$ | Co-occurrence |
| FZD2 | $17 q 21.31$ | $15(57.69 \%)$ | $3(3.70 \%)$ | 3.96 | $5.83 \mathrm{E}-09$ | $4.32 \mathrm{E}-08$ | Co-occurrence |
| FZD1 | $7 q 21.13$ | $16(61.54 \%)$ | $6(7.41 \%)$ | 3.05 | $4.66 \mathrm{E}-08$ | $1.81 \mathrm{E}-07$ | Co-occurrence |
| FZD4 | $11 q 14.2$ | $15(57.69 \%)$ | $7(8.64 \%)$ | 2.74 | $7.40 \mathrm{E}-07$ | $1.90 \mathrm{E}-06$ | Co-occurrence |
| FZD9 | $7 q 11.23$ | $14(53.85 \%)$ | $7(8.64 \%)$ | 2.64 | $3.66 \mathrm{E}-06$ | $7.34 \mathrm{E}-06$ | Co-occurrence |
| FZD5 | $2 q 33.3$ | $9(34.62 \%)$ | $2(2.47 \%)$ | 3.81 | $3.41 \mathrm{E}-05$ | $5.26 \mathrm{E}-05$ | Co-occurrence |
| FZD7 | $2 q 33.1$ | $9(34.62 \%)$ | $2(2.47 \%)$ | 3.81 | $3.41 \mathrm{E}-05$ | $5.26 \mathrm{E}-05$ | Co-occurrence |
| FZD8 | $10 p 11.21$ | $7(26.92 \%)$ | $1(1.23 \%)$ | 4.45 | $1.68 \mathrm{E}-04$ | $2.24 \mathrm{E}-04$ | Co-occurrence |
| FZD10 | $12 q 24.33$ | $7(26.92 \%)$ | $5(6.17 \%)$ | 2.12 | $7.96 \mathrm{E}-03$ | $8.87 \mathrm{E}-03$ | Co-occurrence |
| MSI2 | $17 q 22$ | $18(69.23 \%)$ | $4(4.94 \%)$ | 3.81 | $6.86 \mathrm{E}-11$ | $1.21 \mathrm{E}-09$ | Co-occurrence |
| MSI1 | $12 q 24.31$ | $10(38.46 \%)$ | $8(9.88 \%)$ | 1.96 | $1.73 \mathrm{E}-03$ | $2.05 \mathrm{E}-03$ | Co-occurrence |
| NANOG | $12 p 13.31$ | $9(34.62 \%)$ | $2(2.47 \%)$ | 3.81 | $3.41 \mathrm{E}-05$ | $5.26 \mathrm{E}-05$ | Co-occurrence |
| NANOGNB | $12 p 13.31$ | $9(34.62 \%)$ | $2(2.47 \%)$ | 3.81 | $3.41 \mathrm{E}-05$ | $5.26 \mathrm{E}-05$ | Co-occurrence |
| LRG1 | $19 p 13.3$ | $14(53.85 \%)$ | $1(1.23 \%)$ | 5.45 | $1.05 \mathrm{E}-09$ | $1.14 \mathrm{E}-08$ | Co-occurrence |

