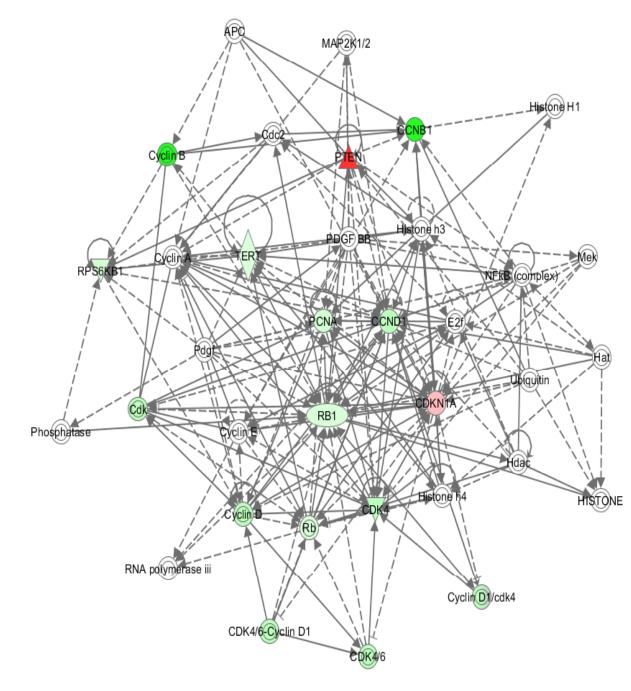
Cell lines	IC <sub>50</sub> (μM)		
	Vicenin-2	Luteolin	Orientin
PC3	26 <u>+</u> 3	48 <u>+</u> 3	98 <u>+</u> 7
DU145	25 <u>+</u> 3	57 <u>+</u> 5	107 <u>+</u> 6
LNCap	44 <u>+</u> 3	78 <u>+</u> 6	124 <u>+</u> 7
PREC	n.d.	n.d.	n.d.

<u>Supplementary Table 1</u> Various flavonoids  $IC_{50}$  values in prostate cancer cell lines.

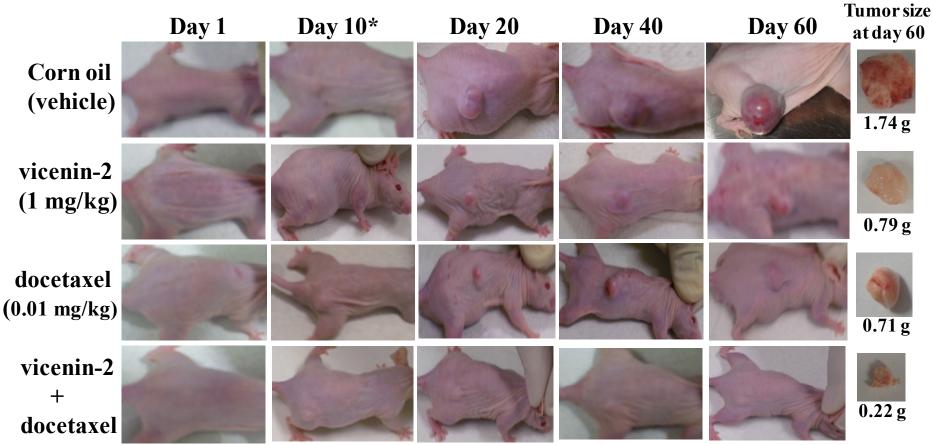
Drug sensitivity assays were performed using MTT (at 72 h) to determine  $IC_{50}$  values. The values are presented as mean <u>+</u> SD from three separate determinations with eight replicates each (n = 24). n.d., not detected; PREC, normal human prostate epithelial cells.



<b>Molecular Processes</b>	P-value
Cancer	1.40 x 10 <sup>-6</sup>
Prostate Cancer Signaling	4.04x 10 <sup>-8</sup>
Connective Tissue Development and Function	1.51 x 10 <sup>-6</sup>
Cell Morphology	1.49 x 10 <sup>-9</sup>
Aryl Hydrocarbon Receptor Signaling	6.92 x 10 <sup>-9</sup>

## Nagaprashantha et al., supplementary figure 1

**Effect of differential regulation of specific proteins on cancer regulatory pathways and networks** For analysis of the impact of specific protein regulation by VCN-2 on targeting signaling pathway networks and to derive statistical inferences, the Uniprot/swiss prot IDs of proteins and ratios obtained by densitometric analyses of respective proteins by Western blots (n=3) were used for Ingenuity pathway analysis (IPA). The network diagram from IPA represents the important signaling nodes affected due to VCN-2 treatment in cell development and cancer network. The statistical analyses for the differential inhibition of the various signaling pathways of importance as determined by IPA in cell morphology, migration and development are represented along with the network.



\*Indicates treatment start alternate day by oral gavage after 10 days of PC3 cells implantation.

## Nagaprashantha et al., supplementary figure 2

**Comparison of antineoplastic effects of docetaxel and vicenin-2 in xenografts of prostate cancer** Hsd: Athymic nude nu/nu mice were obtained from Harlan, Indianapolis, IN. All animal experiments were carried out in accordance with a protocol approved by the Institutional Animal Care and Use Committee (IACUC). Twenty11-weeks-old mice were divided into four groups of 5 animals (treated with corn oil (vehicle), vicenin-2 (1 mg/kg b.w.), docetaxel (0.01mg/kg b.w.), and vicenin-2 + docetaxel). All 20 animals were injected with 2 x 10<sup>6</sup> prostate cancer cells (PC3) suspensions in 100  $\mu$ l of PBS, subcutaneously into one flank of each nu/nu nude mouse. At the same time, animals were randomized treatment groups as indicated in the figure. Treatment was started 10 days after the PC3 cells implantation to see palpable tumor growth. Treatment consisted of vicenin-2 (1 mg/kg b.w.), docetaxel (0.01 mg/kg b.w.), and vicenin-2 + docetaxel, in 100  $\mu$ l corn oil by oral gavage alternate day. Control groups were treated with 100  $\mu$ l corn oil by oral gavage alternate day. Control groups were measured in two dimensions using calipers. Photographs of animals were taken at day 1, day 10, day 20, day 40, and day 60 after subcutaneous injection, are shown for all groups. Photographs of tumors were also taken at day 60.