Figure S1. Increase in SHANK-associated RH domain-interacting protein expression in breast cancer lesion compared with paracancerous healthy tissues. (A) Paracancerous tissues. (B) Breast cancer tissues. Magnification, x400.



Figure S2. Immunohistochemical data of Cyclin D1, CDK4 and c-JUN and GLI2 expression levels. (A) Expression levels of cyclin D1, CDK4, c-JUN and GLI2 in healthy skin and BCC. Magnification, x400. (B) Quantified immunostaining data of Cyclin D1, CDK4, c-JUN and GLI2 using H score in BCC and healthy skin. GLI2, GLI family zinc finger 2; BCC, cutaneous basal cell carcinoma.



Figure S3. Effects of SHARPIN on the regulation of TE354.T cell apoptosis, migration and invasion. Flow cytometric analysis of (A) sh-SHARPIN and (B) sh-Ctrl-infected cells. (C) Quantification of flow cytometry results. Q1-Q4 in A and B represent: Q1, mechanically injured cells; Q2, apoptotic cells of the late stage; Q3, normal cells; and Q4, apoptotic cells of the early stage. The apoptotic rates were calculated as the ratio of Q2+Q4 to the total number of cells. Transwell migration assay analysis of (D) sh-SHARPIN and (E) sh-Ctrl-infected cells, and (F) quantification. Transwell invasion assay analysis of (G) sh-SHARPIN and (H), sh-Ctrl-infected cells, and (I) quantification. The purple cells are the whole stained migrated or invaded cells, the blue stained dots are the nuclei and the transparent dots are sheet pores. Magnification, x200. SHARPIN; SHANK-associated RH domain-interacting protein; shRNA, short hairpin RNA; sh-Ctrl, shRNA-control; ns, not significant.



ID	Sex	Age (years)	Location	Туре	Risk factor	H score
1	F	55	Upper lip	Nodular type	None	140
2	F	55	Right ear	Superficial type	None	90
3	F	57	Right cheek	Superficial type	None	10
4	М	50	Right nose	Nodular type	None	200
5	М	50	Right nose	Adenoidal type	None	20
6	М	59	Right nose	Nodular type	Farmer	10
7	М	80	Left nose	Adenoidal type	None	160
8	М	67	Forehead	Nodular type	None	10
9	F	82	Left nose	Adenoidal type	Outdoor worker	200
10	F	47	Lower jaw	Nodular type	None	100
11	F	80	Back	Nodular type	None	190
12	М	68	Left cheek	Superficial type	None	30
13	М	22	Right cheek	Superficial type	None	20
14	М	62	Left tempus	Superficial type	None	80
15	М	58	Left nose	Adenoidal type	None	10
16	М	43	Left cheek	Superficial type	Outdoor worker	20
17	F	82	Upper lip	Nodular type	None	40
18	F	43	Forehead	Adenoidal type	None	10
19	F	57	Left nose	Adenoidal type	None	30
20	F	44	Right cheek	Nodular type	None	120
21	F	70	Right leg	Adenoidal type	Farmer	10
22	М	61	Left hand	Nodular type	None	10
23	М	78	Right cheek	Adenoidal type	None	60
24	М	65	Left cheek	Superficial type	None	70
25	F	74	Right nose	Superficial type	Outdoor worker	105
26	F	44	Forehead	Nodular type	None	160

Table SI. H scores, risk factors, subtypes and tissue-biopsy locations of BCC in patient cohort.

F, female; M, male; BCC, cutaneous basal cell carcinoma.