

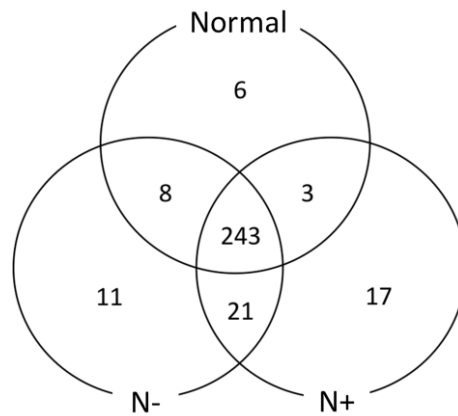
Supplemental Information

Definition of miRNA Signatures of Nodal

Metastasis in LCa: miR-449a Targets Notch Genes and Suppresses Cell Migration and Invasion

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1A



1B

Commonly detectable 243 miRNAs in Normal and Cancer (N-,N+)						
let-7a	m R-141	m R-196b	m R-28	m R-362-3p	m R-491	m R-576-5p
let-7b	m R-142-3p	m R-197	m R-28-3p	m R-363	m R-492	m R-579
let-7c	m R-142-5p	m R-199a	m R-296	m R-365	m R-493	m R-582-3p
let-7d	m R-143	m R-199a-3p	m R-299-5p	m R-370	m R-494	m R-582-5p
let-7e	m R-145	m R-199b	m R-29a	m R-373	m R-495	m R-590-5p
let-7f	m R-146a	m R-19a	m R-29b	m R-374	m R-500	m R-597
let-7g	m R-146b	m R-19b	m R-29c	m R-374-5p	m R-501	m R-598
m R-1	m R-146b-3p	m R-200a	m R-301	m R-375	m R-502-3p	m R-618
m R-100	m R-148a	m R-200b	m R-301b	m R-376a	m R-508	m R-625
m R-101	m R-148b	m R-200c	m R-302c	m R-376c	m R-509-5p	m R-628-5p
m R-103	m R-149	m R-202	m R-30b	m R-379	m R-511	m R-629
m R-106a	m R-150	m R-203	m R-30c	m R-382	m R-512-3p	m R-636
m R-106b	m R-152	m R-204	m R-31	m R-410	m R-517a	m R-642
m R-10a	m R-155	m R-205	m R-32	m R-411	m R-517c	m R-652
m R-10b	m R-15a	m R-20a	m R-320	m R-422a	m R-518a-3p	m R-655
m R-124a	m R-15b	m R-20b	m R-323-3p	m R-423-5p	m R-518b	m R-660
m R-125a-3p	m R-16	m R-21	m R-324-3p	m R-425-5p	m R-518d	m R-671-3p
m R-125a-5p	m R-17	m R-210	m R-324-5p	m R-429	m R-518e	m R-708
m R-125b	m R-181a	m R-212	m R-328	m R-433	m R-518f	m R-744
m R-126	m R-181c	m R-214	m R-330	m R-449a	m R-519a	m R-758
m R-127	m R-182	m R-218	m R-331	m R-449b	m R-519d	m R-885-5p
m R-128a	m R-183	m R-22	m R-331-5p	m R-451	m R-520a	m R-886-3p
m R-130a	m R-185	m R-220	m R-335	m R-452	m R-520f	m R-886-5p
m R-130b	m R-186	m R-221	m R-337-5p	m R-454	m R-520g	m R-889
m R-132	m R-187	m R-222	m R-338-3p	m R-455	m R-522	m R-891a
m R-133a	m R-18a	m R-223	m R-339-3p	m R-455-3p	m R-523	m R-9
m R-133b	m R-18b	m R-224	m R-339-5p	m R-483-5p	m R-532	m R-92a
m R-134	m R-190	m R-23a	m R-340	m R-484	m R-532-3p	m R-93
m R-135a	m R-191	m R-23b	m R-342-3p	m R-485-3p	m R-539	m R-95
m R-135b	m R-192	m R-24	m R-342-5p	m R-486	m R-542-5p	m R-96
m R-136	m R-193a-3p	m R-25	m R-345	m R-486-3p	m R-548b-5p	m R-98
m R-138	m R-193a-5p	m R-26a	m R-34a	m R-487a	m R-548c-5p	m R-99a
m R-139-5p	m R-193b	m R-26b	m R-34c	m R-487b	m R-548d-5p	m R-99b
m R-140	m R-194	m R-27a	m R-361	m R-488	m R-574-3p	
m R-140-3p	m R-195	m R-27b	m R-362	m R-489	m R-576-3p	

1C

Detectable 8 miRNAs in Normal and N-	Detectable 21 miRNAs in N- and N+	Detectable 6 miRNAs in only Normal	Detectable 17 miRNAs in only N+
miR-219-2-3p miR-346 miR-369-5p miR-383 miR-409-5p miR-502 miR-627 miR-654-3p	miR-105 miR-129-3p miR-147b miR-184 miR-198 miR-296-3p miR-424 miR-431 miR-450b-5p miR-490 miR-501-3p miR-503 miR-519c miR-525-3p miR-542-3p miR-548d miR-570 miR-589 miR-651 miR-873 miR-876-5p	miR-215 miR-450b-3p miR-504 miR-211 miR-139-3p miR-505	miR-107 miR-153 miR-208b miR-369-3p miR-381 miR-515-5p miR-516b miR-519e miR-520a# miR-551b miR-872 miR-876-3p miR-219-1-3p miR-325 miR-517b miR-520b miR-888
Detectable 3 miRNAs in Normal and N+		Detectable 11 miRNAs in only N-	
miR-499 miR-545 miR-874		miR-137 miR-216b miR-372 miR-450a miR-506 miR-510 miR-515-3p miR-521 miR-654 miR-672 miR-674	

Figure S1. Classification of detectable miRNAs among Normal, N- and N+ group.

(A) 309 miRNA candidates, detected at least 1 pool within 15 pool in PCR array assays, were selected and classified into 7 group of expression pattern by Venn diagram. (B) A commonly detected miRNA profile among Normal and Cancer (N-, N+) groups. (C) Detectable miRNAs in 2 different groups and solely miRNA expression profiles among Normal, N- and N+ group.

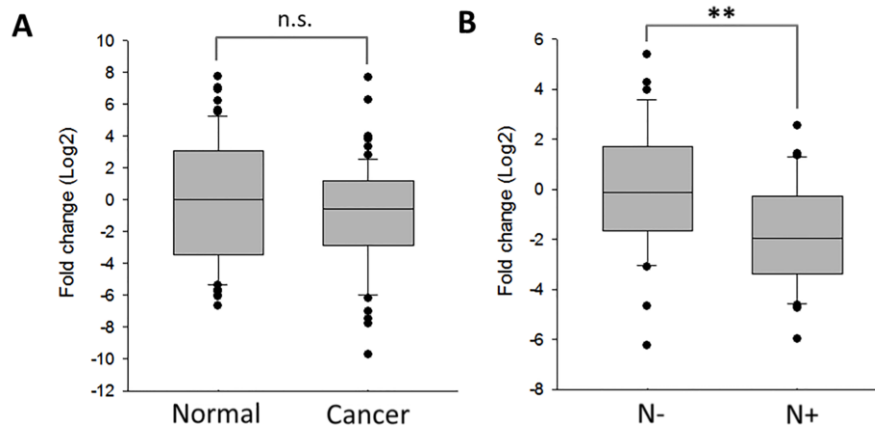


Figure S2. Validation of miR-449a expression in LCa tissues.

(A) The expression level of miR-449a was validated in LCa tissues with N+ (n = 32) and N- (n = 32) in a total of 64 LCa samples and their paired normal tissues (n = 64) using qRT-PCR. (B) miR-449a level in N+ (n = 32) compared to N- (n = 32). All results are shown as the box-and-whisker plot. For the normalization, U6 snRNA was used as endogenous control. Each sample was run in triplicate. Error bars show mean \pm SD. The t test was used for the calculation of p-value. * $p < 0.05$, ** $p < 0.01$.