

**Supplementary Table S1.** (a) Table of relative standard deviation of marker concentration in HNSCC patients, control subjects without infection with at least 2 samples per material (b) Table of the subgroup with head and neck infections ( $n=15$ ) and their diagnosis of infection at time of sample collection. Localization specified for the different types of infections. (c) R-packages used for statistical analysis and visualization.

Variable	TIMP-1 serum	TIMP-1 saliva	Hsp70 serum	Hsp70 saliva
Per Patient (n=29, $\geq 2$ samples)	21.9%	56.5%	88.5%	81.4%
HNSCC patients (n=52)	37.5%	68.5%	182.7%	142.2%
Subjects without infection (n=25)	19.8%	70.1%	123.5%	97.8%

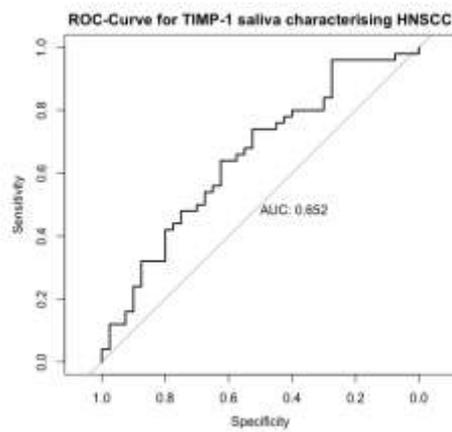
(a)

Diagnosis of subgroups with infections	localization	number = n
abscess	peritonsilliar, tongue, jaw ( $n=2$ )	4
purulent sialadenitis	salivary gland	1
erysipelas	temporal scalp	1
laryngitis	larynx	2
osteonecrosis	lower jaw ( $n=2$ )	2
cellulitis	orbital, base of the mouth	2
sinusitis	paranasal sinus	1
tonsillitis	tonsills	2

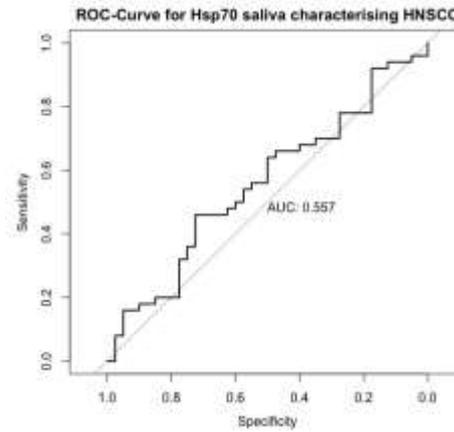
(b)

R-packages
datasets, car, pacman
tidyverse, dplyr
psych, survival, survminer
ggplot2, ggthemes, ggrepel, ggsignif, ggpubr
pROC, gridExtra, finalfit
gtsummary, devtools

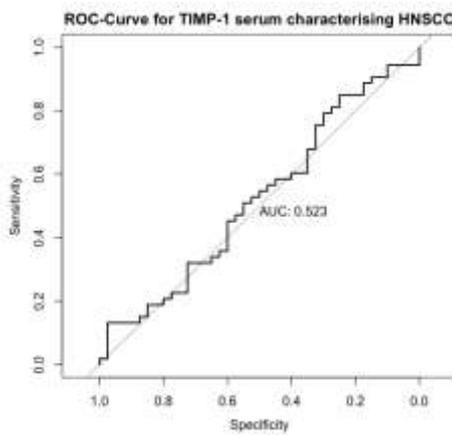
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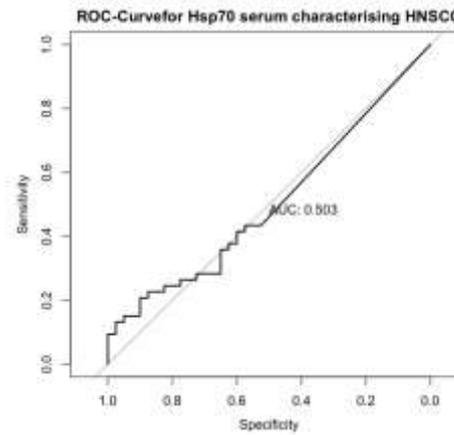
(a)



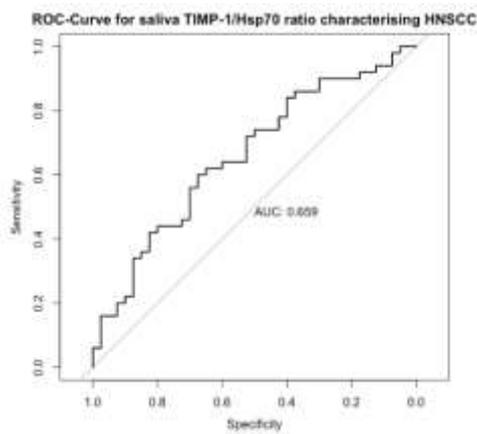
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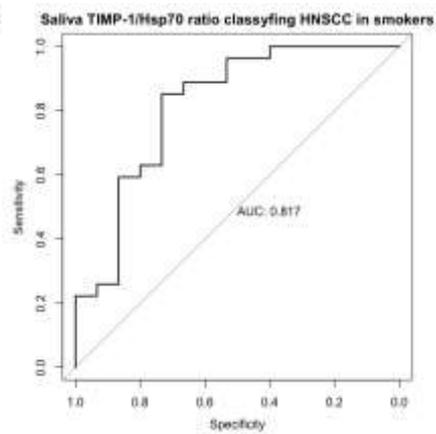
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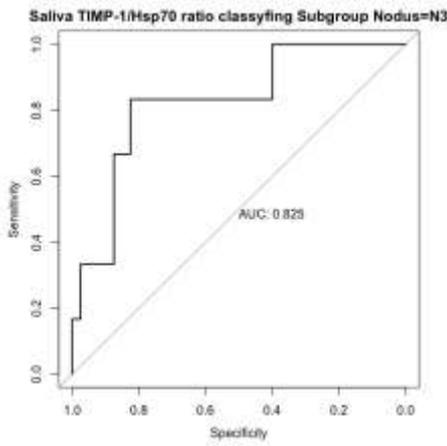
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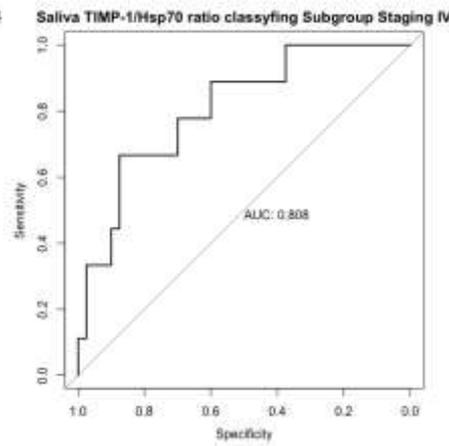
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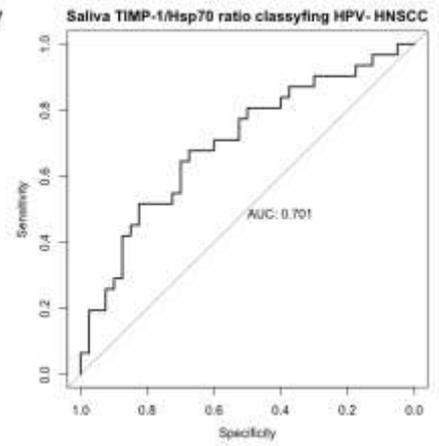
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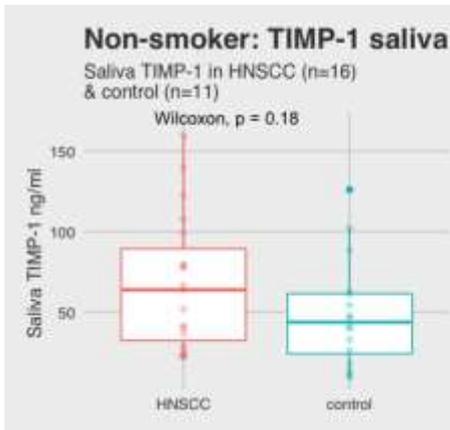
(g)



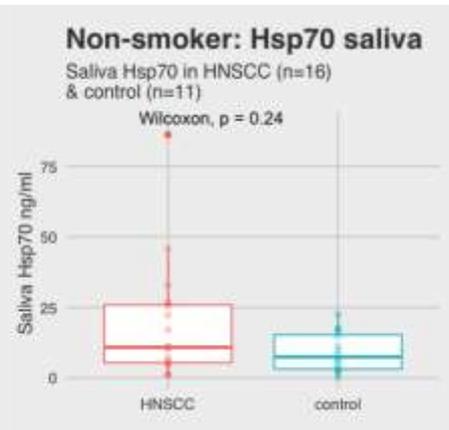
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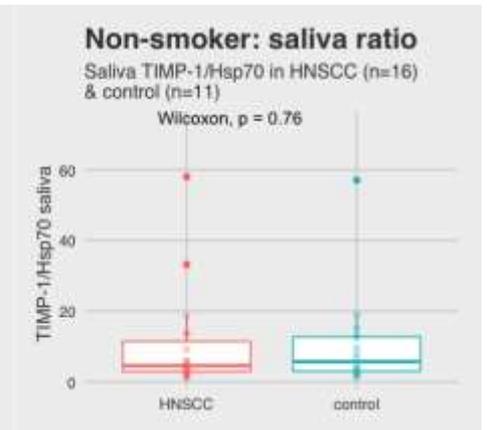
(i)



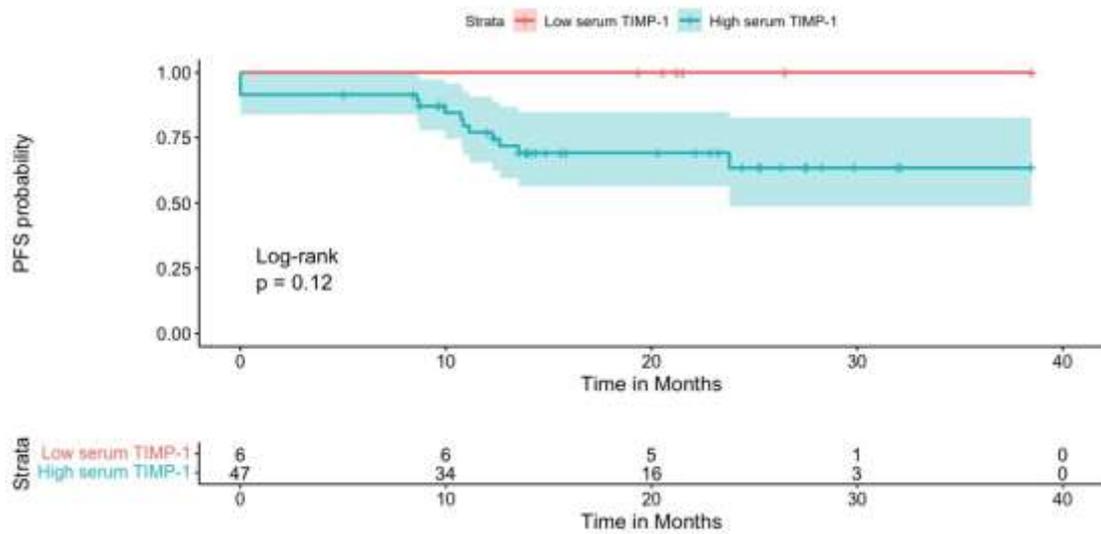
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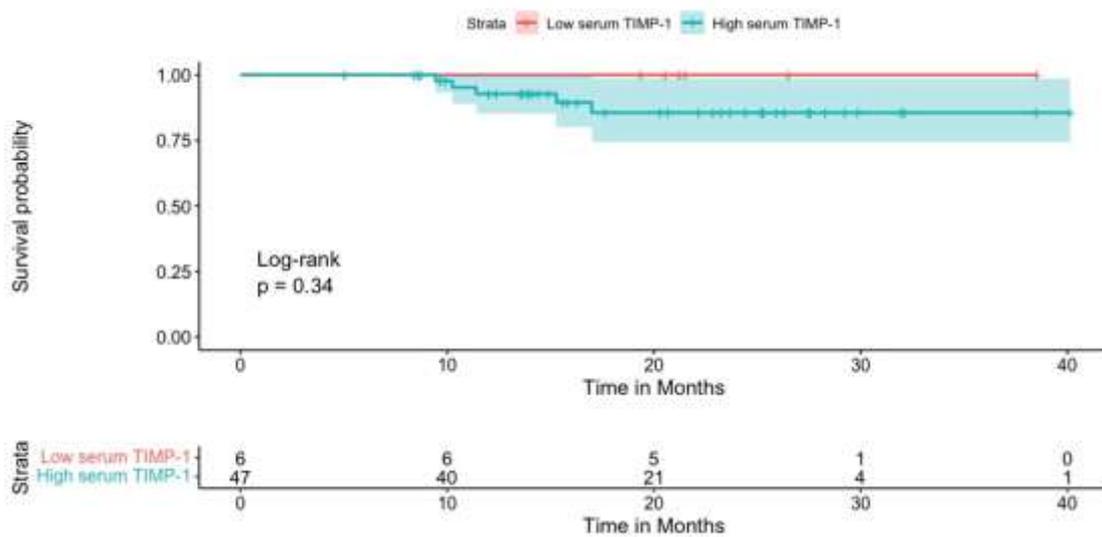
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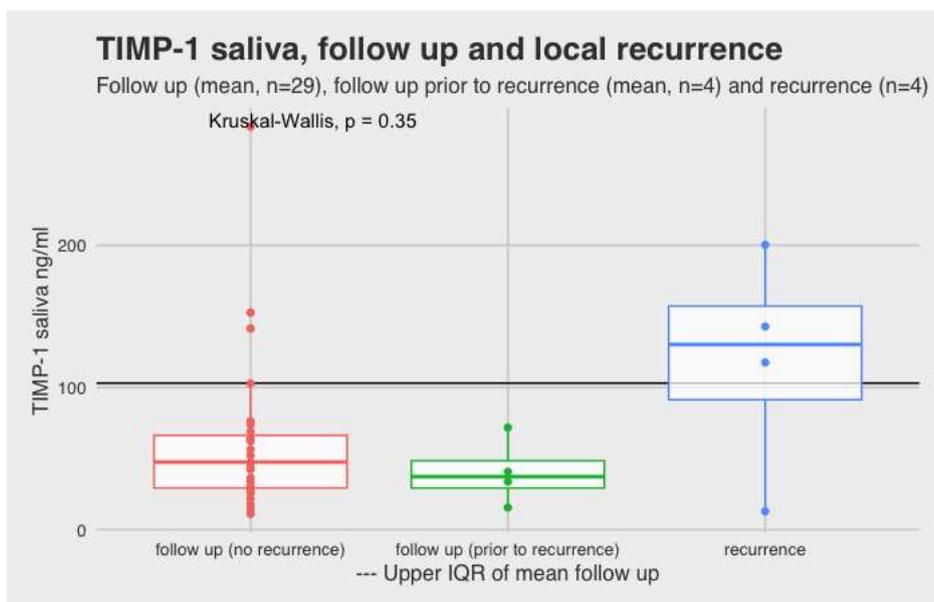
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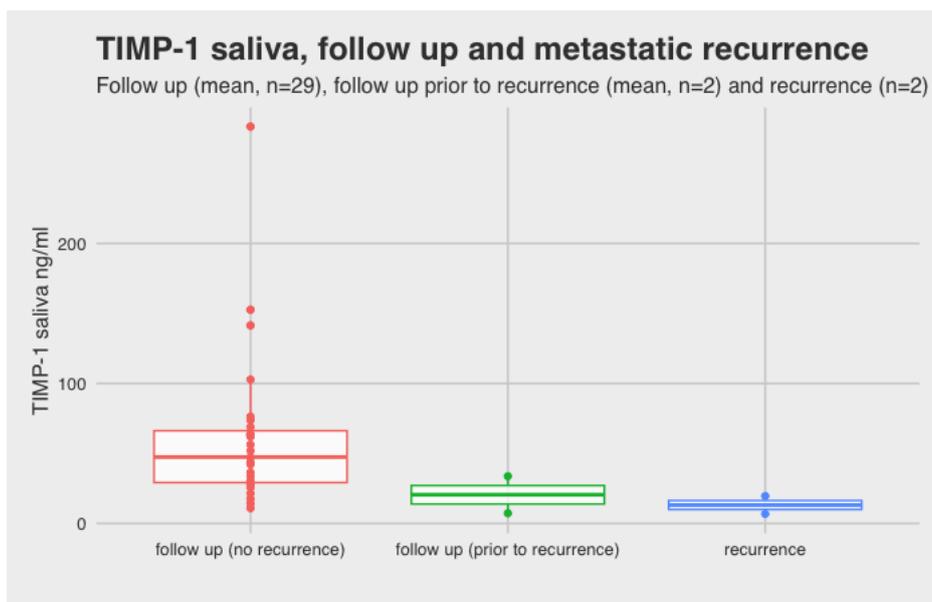
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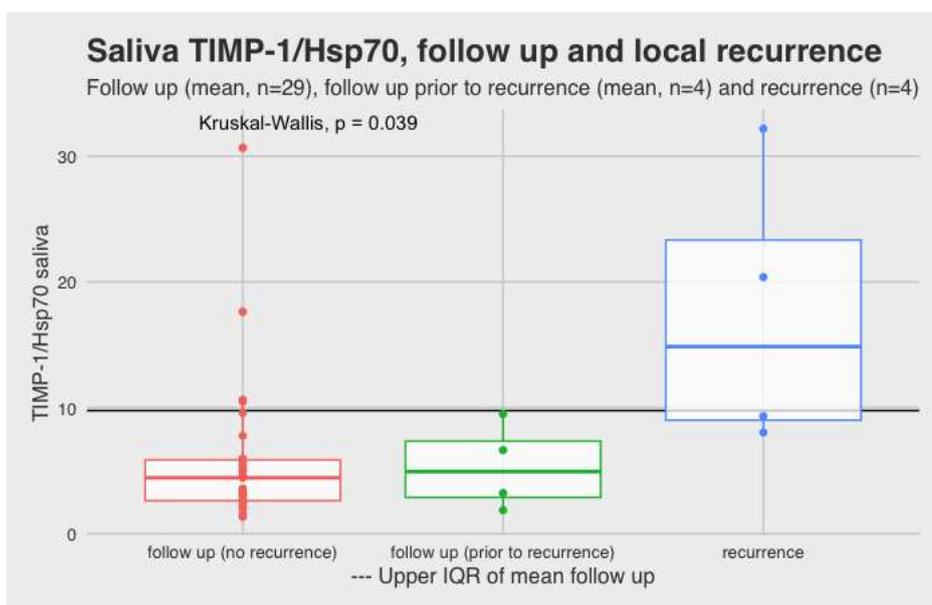
(n)



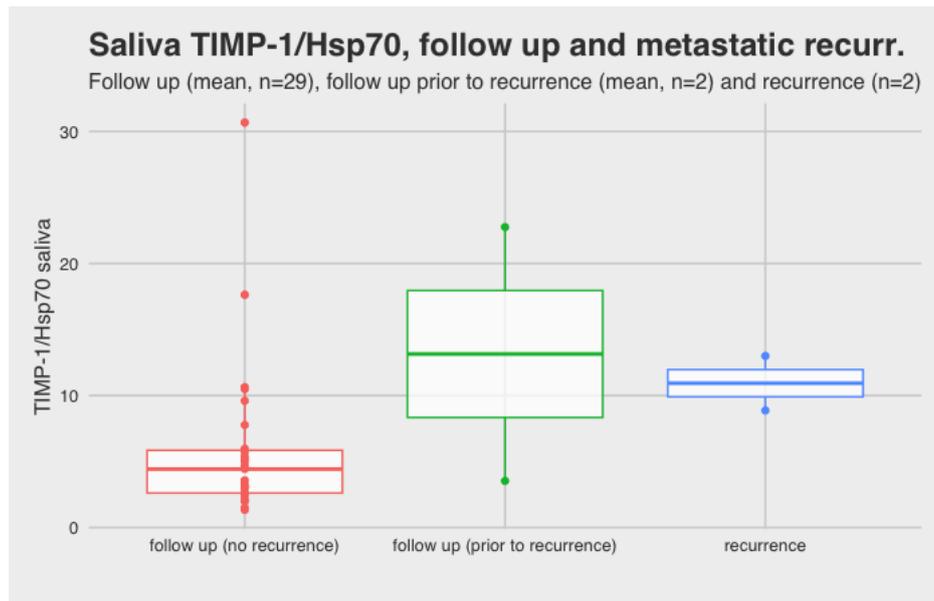
(o)



(p)



(q)



(r)



(s)

**Supplementary Figure S1.** (a) Receiver operator characteristic curve for saliva TIMP-1 classifying HNSCC patients ( $n=53$ ) and control subjects ( $n=40$ ), (b) Receiver operator characteristic curve for saliva Hsp70 classifying HNSCC patients ( $n=53$ ) and control subjects ( $n=40$ ), (c) Receiver operator characteristic curve for serum TIMP-1 classifying HNSCC patients ( $n=53$ ) and control subjects ( $n=40$ ), (d) Receiver operator characteristic curve for serum Hsp70 classifying HNSCC patients ( $n=53$ ) and control subjects ( $n=40$ ), (e) Receiver operator characteristic curve for TIMP-1/Hsp70 saliva ratio classifying HNSCC patients ( $n=53$ ) and control subjects ( $n=40$ ), (f) Receiver operator characteristic curve for TIMP-1/Hsp70 saliva ratio classifying HNSCC patients in smoker subgroup with smokers with HNSCC ( $n=28$ ) & smokers control ( $n=15$ ) (g) Receiver operator characteristic curve for TIMP-1/Hsp70 saliva ratio classifying HNSCC patients in a subgroup with Nodus state N3 ( $n=6$ ) & control ( $n=40$ ), (h) Receiver operator characteristic curve for TIMP-1/Hsp70 saliva ratio classifying HNSCC patients in a subgroup with UICC Stage IV ( $n=6$ ) & control ( $n=40$ ), (i)

Receiver operator characteristic curve for TIMP-1/Hsp70 saliva ratio classifying HNSCC patients in a subgroup with HPV negative ( $n=34$ ) & control ( $n=40$ ), (j) Saliva ratio TIMP-1 in non-smoking subjects, comparing HNSCC and the combined control group, (k) Saliva ratio Hsp70 in non-smoking subjects, comparing HNSCC and the combined control group, (l) Saliva ratio TIMP-1/Hsp70 in non-smoking subjects, comparing HNSCC and the combined control group, (m) PFS probability for TIMP-1 concentration above (high) and below (low) cut off value 196ng/ml, (n) OS probability for TIMP-1 concentration above (high) and below (low) cut off value 196ng/ml, (o) Saliva TIMP-1 concentration mean during follow up, follow up before local recurrence and concentration at diagnosis of local recurrence, (p) Saliva TIMP-1/Hsp70 ratio mean during follow up, follow up before local recurrence and at diagnosis of local recurrence, (q) Saliva TIMP-1/Hsp70 ratio mean during follow up, follow up before metastatic recurrence and concentration at diagnosis of metastatic recurrence, (r) Saliva TIMP-1/Hsp70 ratio mean in follow up, follow up before metastatic recurrence and concentration at diagnosis of metastatic recurrence, (s) TIMP-1/Hsp70 saliva ratio mean during follow up and mean six months prior to recurrence