

Supplementary Table S1: Patient cohort - treatment and outcome data

| patient | gender | age at diagnosis | year of 1 st op | initial surgery | RLN resection | resection margin | adjuvant therapy | local recurrence after 1 st surgery | time to local recurrence | Year of 2 nd op | local recurrence after 2 st surgery | adjuvant therapy | distant metastases | time to distant metastases | death due to disease | overall follow-up (months) | histology | level VI (+/total) | level II-V (+/total) |
|-----------------|--------|------------------|----------------------------|-----------------|---------------|------------------|------------------|--|--------------------------|----------------------------|--|------------------|--------------------|----------------------------|----------------------|----------------------------|-----------|--------------------|----------------------|
| 15 | F | 63 | 1996 | LE | No | R1 | no | No | -- | -- | -- | no | No | -- | No | 318 | LR | nd | nd |
| 5 | F | 62 | 2005 | EB | No | R0 | no | no | -- | -- | -- | no | no | -- | no | 202 | HR | 0/2 | nd |
| 7 | F | 67 | 2006 | EB | No | R0 | no | no | -- | -- | -- | no | no | -- | no | 185 | HR | 0/1 | nd |
| 2 | M | 66 | 2006 | EB | Yes | R1 | no | Yes | 13 | 2009 | -- | RT (55Gy) 20# | lung | 58 | Yes | 130 | HR | 2/31 | dc |
| 1 | F | 57 | 2007 | EB | No | R0 | no | no | -- | -- | -- | no | no | -- | no | 150 | HR | 0/8 | nd |
| 4 | F | 52 | 2007 | EB | No | R0 | no | no | -- | -- | -- | no | no | -- | no | 130 | LR | 0/16 | nd |
| 9 | F | 47 | 2008 | EB | No | R0 | no | no | -- | -- | -- | no | no | -- | no | 172 | HR | 0/7 | 0/12 |
| 8 | M | 33 | 2008 | EB | No | R0 | no | no | -- | -- | -- | no | no | -- | no | 171 | LR | 0/3 | nd |
| 3 | M | 40 | 2008 | EB | No | R0 | no | no | -- | | -- | no | no | -- | no | 134 | LR | 0/3 | 0/43 |
| 10 | F | 63 | 2009 | EB | Yes | R0 | no | no | -- | | -- | no | no | -- | no | 128 | LR | 0/9 | 0/23 |
| 17 ^a | M | 57 | 2010 | LE | No | R1 | no | Yes | 29 | 2013 | No | RT (60 Gy) 30# | No | -- | No | 137 | HR | nd | nd |
| 11 | M | 37 | 2010 | EB | Yes | R0 | no | no | -- | -- | -- | no | no | -- | no | 120 | HR | 0/10 | nd |
| 18 ^a | M | 81 | 2010 | LE | No | R1 | no | Yes | Persistent | 2012 | No | RT (60 Gy) 30# | No | -- | No | 83 ^b | HR | nd | nd |
| 12 | F | 75 | 2011 | LE | No | R1 | RT (60 Gy) 30# | no | -- | -- | -- | no | no | -- | no | 123 ^b | LR | nd | nd |
| 16 ^a | F | 63 | 2011 | LE | No | R0 | no | No | -- | -- | -- | no | No | -- | No | 134 | LR | nd | nd |
| 19 ^a | F | 64 | 2011 | LE | No | R1 | no | Yes | 14 | 2013 | No | no | No | -- | No | 127 | LR | nd | nd |
| 13 | F | 54 | 2012 | EB | No | R1 | RT (60 Gy) 30# | no | -- | -- | -- | no | no | -- | no | 117 | LR | 0/3 | 0/32 |
| 14 | F | 58 | 2013 | EB | Yes | R0 | no | no | -- | -- | -- | no | no | -- | no | 104 | HR | 0/15 | nd |
| 6 | F | 59 | 2013 | EB | No | R0 | no | no | -- | -- | -- | no | no | -- | no | 63 ^b | LR | 0/3 | nd |
| 21 | F | 81 | 2013 | EB | No | R0 | no | No | -- | -- | -- | No | No | -- | No | 14 ^b | LR | 0/5 | nd |
| 22 | M | 41 | 2014 | LE | No | R0 | no | No | -- | -- | -- | No | No | -- | No | 95 | HR | 0/28 | nd |
| 23 | F | 43 | 2014 | EB | No | R1 | no | No | -- | -- | -- | No | No | -- | No | 82 | HR | nd | nd |
| 20 | F | 46 | 2015 | EB | No | R0 | no | No | -- | -- | -- | No | No | -- | No | 75 | LR | nd | nd |
| 24 | F | 82 | 2016 | LE | No | R0 | no | No | -- | -- | -- | No | No | -- | No | 61 | HR | 0/5 | nd |
| 25 | M | 71 | 2018 | EB | No | R0 | no | No | -- | -- | -- | No | No | -- | No | 49 | LR | 0/12 | nd |

High Risk (HR)
Low Risk (LR)
nd: lymph node dissection not done
(+/total): positive lymph node on histology over total excised
en bloc (EB), Local excision (LE), Recurrent laryngeal nerve (RLN)
RT: radiotherapy
#: fractions
Patient 15 was operated on in 1996 by another surgeon at the centre.
Patient 12, 22, 24 were not suspected to have cancer and underwent local excision alone
^a: Patient had initial surgery elsewhere and were operated for recurrence at KCH
^b: Patient died due to other causes