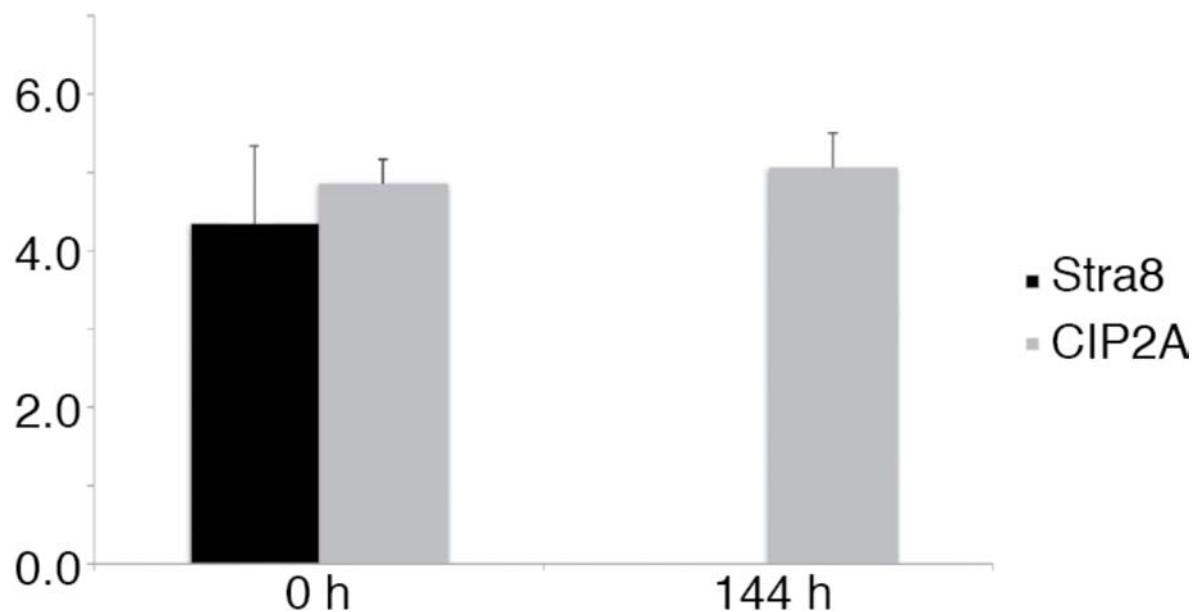
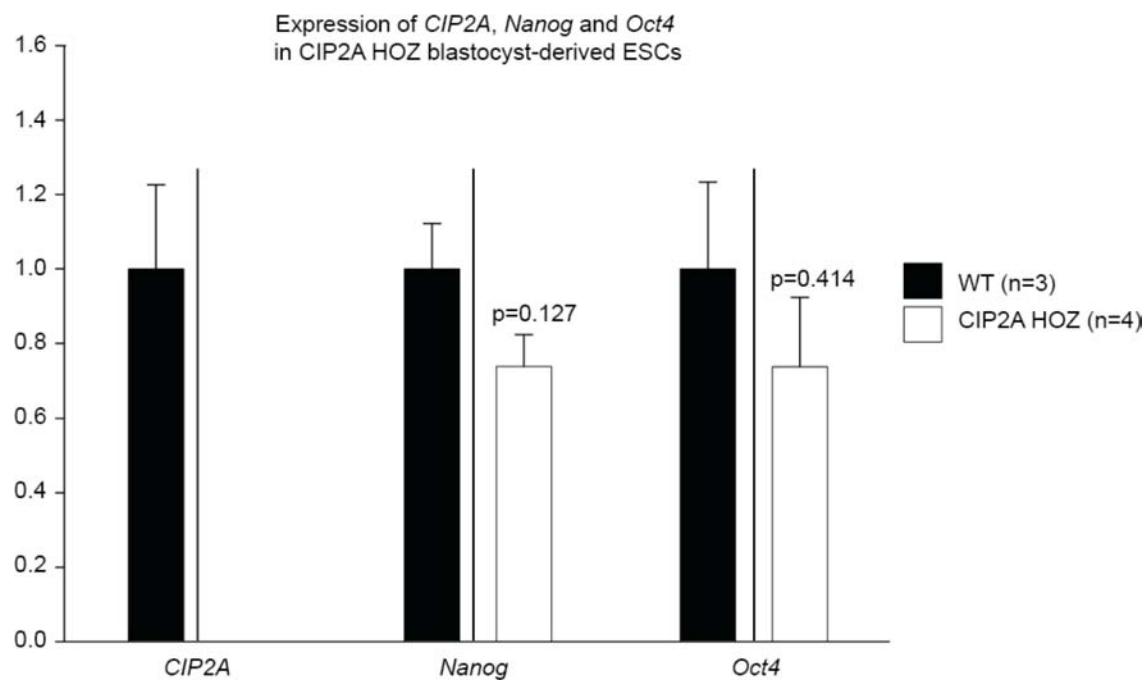


**SUPPLEMENTARY FIGURES AND TABLES**

Number of positive cells/seminiferous tubule 0 and 144 hours after 4 Gy X-irradiation



Supplementary Figure S1: Number of Stra8 and CIP2A positive cells/seminiferous tubule 0 and 144 hours after 4 Gy X-irradiation.



**Supplementary Figure S2:** mRNA expression of CIP2A, Nanog and Oct4 in CIP2A HOZ and wild type blastocyst-derived embryonic stem cells.

Database: TRANSFAC MATRIX TABLE, Rel.3.3 06-01-1998  
 Query: CIP2A promoter  
 Taxonomy: Vertebrate  
 Threshold: 90.0 poi

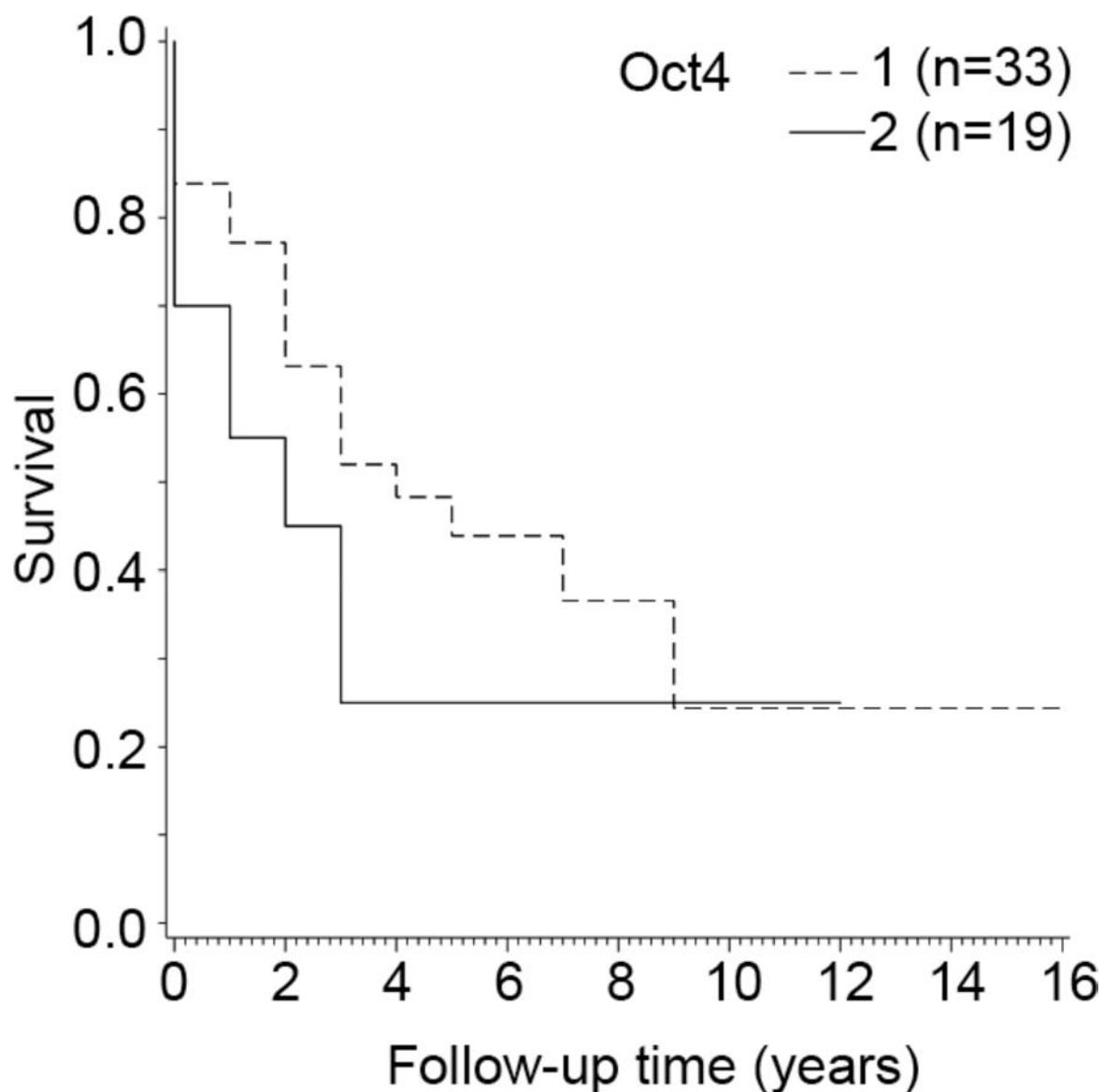
```

ATGTTGCTTT CTTAATGAGG TCACCTTCCC ATTTCCCTTA
TCAATTACCA entry score
----->
<A
HREF=http://www.cbrc.jp/htbin/bget_tfmatrix?M00137>M0
0137</A> Oct-1 93.1
&lt;-----
----- <A

-1650
ATGTTGCTTTCTTAATGAGGTACCTTCCCATTTCCTTATCAATTACCAACATTATT
CTAGAGTAATAACGTCTATTTCTCTTATATCATTTCTTACTTTATTTATTGTG
TTTATTATTTGGTCCCTACCAAAATGTAAGTTGCATGCCAGTAGTATTTGTTT
TTTCACTGAGTCTATTGTGTCTAGAAAAGTGCTTAGCACATTGAGATTCTCAATGA
ACTACTTATTGAATGAACAGTCTATGAACCAGGTATCTCCCTGGCCAGATTTACC
TAATGAAGATTCTGCAGCAGTGAGAACCTGCCTAGAGTCACATCGTCAAAGGTGGAG
CTAGAACATCTGAAGCAACCTGGCTCTCACTCTTACCACTGCTGCATGTTACTGCAT
GGTGCCTCTATTATGTGGTGAATTCAAAAGTACTATTGTATGTTCCCTTAC
TAGACAGTTCCCTCGCAGCAGGGATACTACTTCATCTGTTCCCTGACTGGCAGTT
TCTAACCCATGTTACACGCTCTATAATTGTTACCGAATGAATGAAAGCATAATGA
ACACACAAGCTACCCAAAGATTTCATGAATGTCCAACGGTAAATCATTTCATTTT
ATCTTCAGATTAAACTTTATAAAAAACAAAACAAAACACCAAACCTGTCTTCA
AAAATCTAGTAATTCAAAAAAAATCTTTGAAGTGAAAAAACATGATTTCTGATAA
ACGATTAAATTAAATGAAATGTACCTTACATCTACATTCTACATCCTGGTTTTT
AAAGCTTTATTGACGTTAGGAATATTAAGCAAAAGCTCCAAACAGTAACGTGA
CTCGCTTCATTACATACATGCAATAATTAAAGCTATCTCGATTAAAAACGC
AAATAATAGTGCCATTTCGTAGACATCGAGAATTATAAAACATCAATCATGCCAG
AGAGAAACAGACACCTTCACCTACAAAAACTGACGCTAACGAGTAACACCTCCGA
GCAATACCTGGCCAGGGTCAGCAGGAGGTAGTCTTCTCGAATAATGTGACAATA
CTTGGTCAGGGCATGACTAATTGCCACATAATGCCAATAGGTTGACTCTGAGAAA
CTACCATCCCCGGCAGAAGGGCGGGTAGGAGAGATTAAAAACGAGGCCCTC
CCAGGCCCTCAAATCTAGGCCAGATTCTCTCAGAGCTCCTCACCGTGT
CTAGACTAGGGCAAGCGACCATTCTCAGGTAGAGGATGACGCACAAACGAAAAAC
TGGCCATCCAACATGAAGGAGCAGGAAGCGCACGAAATCAGAGCGCACAGCTGAGTG
AGGAATCCCCCTCTCTTAACGATTCTCTCCGAGAAATCGCAGATTCTCGCCT
TCACGGGATCTCAGGCCAACCTCGCGGCCCTCAGACGAGGGTGGGTTAGCAGGGG
GCAGCTCCCAACCCCCGTCCTGGACCCACAAATCACCTCGACCCCTGGCCCACCCGGC
CGTCACCGAGAACGGTCCCCCTAGGGTGCTAGGGACTTCGGAGCCGACCGGATCCG
GAAGCTTCTGAGAGCGAGGGGTGGGCCAAAATCAAAAAAGC+1

```

**Supplementary Figure S3: Bioinformatics analysis of -1802 bp CIP2A promoter fragment identified putative octamer binding elements at region -1650 to -1600 bp.**



**Supplementary Figure S4: The Kaplan–Meier 5 year overall survival curve from the HNSCC material ( $n = 52$ ).** The higher curve (1) represents the patients with a negative Oct4 expressing tumor, and the lower curve (2) represents HNSCC patients having strong Oct4 expression.

**Supplementary Table S1. Primer design, accession numbers, annealing temperatures and amplicon lengths.** Letters “m” and “h” in front of gene name refer to genes of mouse or human origin, respectively.

Gene	Accession number	Annealing temperature	Primers	Product length
<i>mCD9</i>	NM_007657	56°C	5'-TGCAGTGCTTGCTATTGGAC-3' 5'-GGCGAATATCACCAAGAGGA-3'	219 bp
<i>hCIP2A</i>	NM_020890	57.5°C	5'-GCTTGAAGTCCTGCTCCTG-3' 5'-CAAGGCAACTCAAGCATTCA-3'	161 bp
<i>mCIP2A</i>	NM_172616	57°C	5'-GCGCCATGTACTCAGTCAGA-3' 5'-AGGAAGCAGAAGGGTCACAA-3'	234 bp
<i>hc-KIT</i>	NM_000222	60°C	5'-TCATGGTCGGATCACAAAGA-3' 5'-AGGGGCTGCTCCTAAAGAG-3'	205 bp
<i>mc-Kit</i>	NM_021099	56°C	5'-ATCCGACTTGTCAAGATGG-3' 5'-AAGGCCAACCAAGGAAAAGTT-3'	192 bp
<i>hNANOG</i>	NM_024865	57.5°C	5'-GATTGTGGCCTGAAGAAA-3' 5'-AAGTGGTTGTTGCCTTG-3'	154 bp
<i>hOCT4</i>	NM_002701	64°C	5'-TGGAGAAGGAGAACGCTGGAGCAAAA-3' 5'-GGCAGATGGTCGTTGGCTGAATA-3'	185 bp
<i>mOct4</i>	NM_013633	64°C	5'-CACGAGTGGAAAGCAACTCA-3' 5'-AGATGGTGGTCTGGCTGAAC-3'	245 bp
<i>mPLZF</i>	NM_001033324	59°C	5'-AACGGTTCCTGGACAGTTG-3' 5'-CCCACACAGCAGACAGAAGA-3'	172 bp
<i>mPpia</i>	NM_008907	63°C	5'-CATCCTAAAGCATACAGGCCTG-3' 5'-TCCATGGCTTCCACAATGTT-3'	164 bp
<i>hRPL19</i>	NM_000981	55°C	5'-AGGCACATGGGCATAGGTAA-3' 5'-CCATGAGAACCGCTTGT-3'	198 bp
<i>mRPL19</i>	NM_009078	55°C	5'-GGACAGAGTCTTGATGATCTC-3' 5'-CTGAAGGTCAAAGGAAATGTG-3'	195 bp
<i>mStra8</i>	NM_009292	57°C	5'-ATGCAATGTTGCTGAAGTGC-3' 5'-GGAAGCAGCCTTCTCAATG-3'	161 bp

**Supplementary Table S2. Used siRNA sequences**

siRNA	5`-3`
CIP2A	CUGUGGUUGUGUUUGCACU(TT)
siOct4-1	GGAGAACUGGAGCAAAAC(TT)
siOct4-2	GCCGGGCUGGGUUGAUCCU(TT)
Nanog-2	TTGGTTAACGTTCAAATGA(AT)
Nanog-4	CTGGAGGT CCTATTCTCT(AA)
Sox2-4	TAGGACAGTTGCAAACGTG(AA)
Sox2-5	CAGCTCGCAGACCTACATG(AA)