

## Human leukocyte antigen class II expression is a good prognostic factor in adult T-cell leukemia/lymphoma

Mai Takeuchi,<sup>1</sup> Hiroaki Miyoshi,<sup>1</sup> Naoko Asano,<sup>2</sup> Noriaki Yoshida,<sup>1,3</sup> Kyohei Yamada,<sup>1</sup> Eriko Yanagida,<sup>1</sup> Mayuko Moritsubo,<sup>1</sup> Michiko Nakata,<sup>1</sup> Takeshi Umeno,<sup>1</sup> Takaharu Suzuki,<sup>1</sup> Satoru Komaki,<sup>1</sup> Hiroko Muta,<sup>1</sup> Takuya Furuta,<sup>1</sup> Masao Seto<sup>1</sup> and Koichi Ohshima<sup>1</sup>

<sup>1</sup>Department of Pathology, Kurume University School of Medicine, Kurume, Fukuoka; <sup>2</sup>Department of Molecular Diagnostics, Nagano Prefectural Shinshu Medical Center, Suzaka, Nagano and <sup>3</sup>Department of Clinical Studies, Radiation Effects Research Foundation, Hiroshima, Japan

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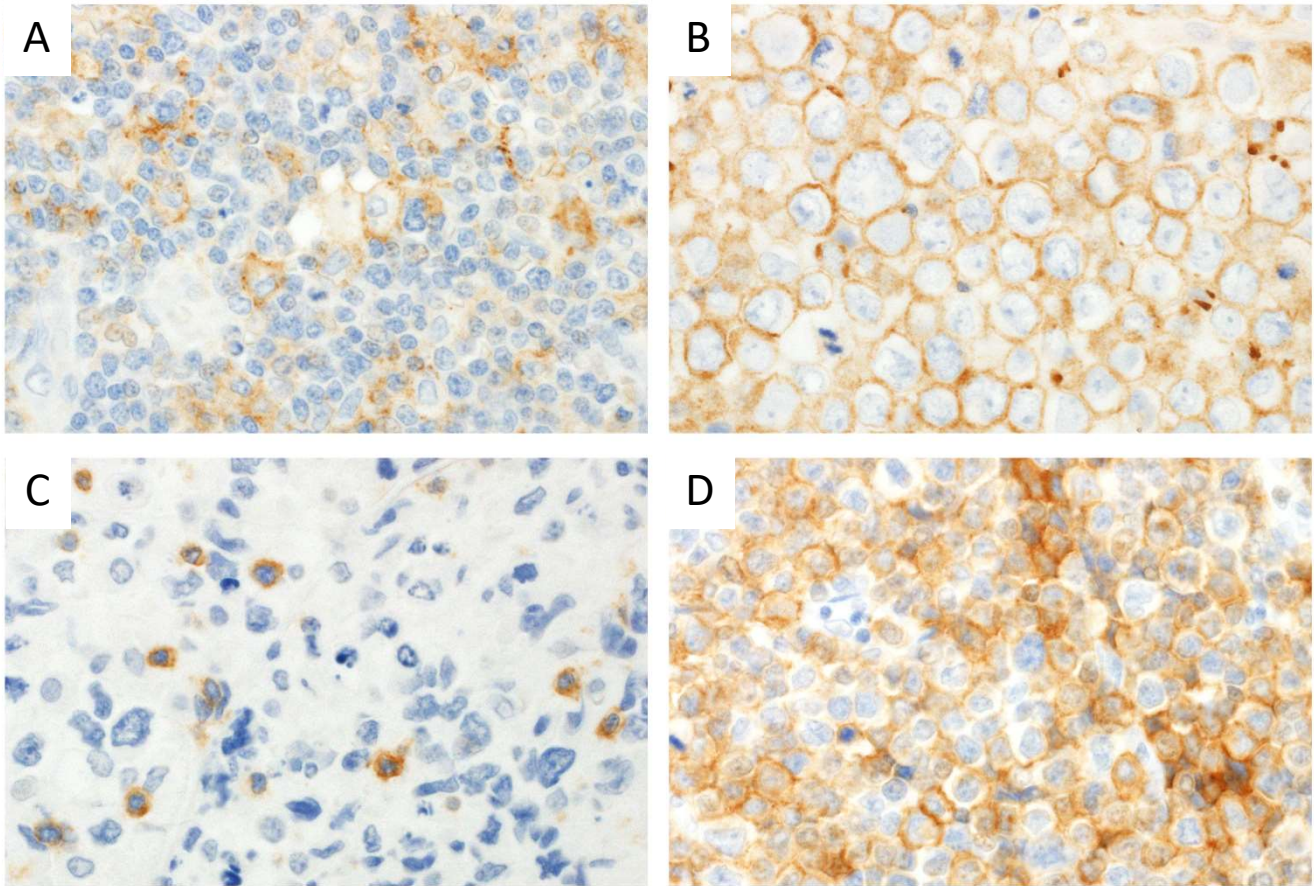
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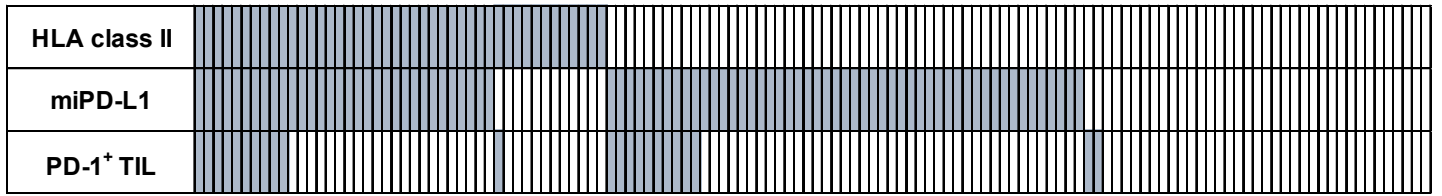
Correspondence: *KOICHI OHSHIMA* - ohshima\_kouichi@med.kurume-u.ac.jp

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**Supplemental figure 1. Expression patterns of PD-L1 and PD-1.**

A) Programmed death ligand 1 (PD-L1) expression on microenvironmental stromal cells (miPD-L1). miPD-L1s have irregular shaped cytoplasm with round small nuclei without atypia. B) PD-L1 expression on neoplastic cells (nPD-L1). PD-L1-positive tumor cells have large atypical nuclei with well-circumscribed cytoplasm. C) Programmed cell death 1 (PD-1) expression on tumor infiltrating lymphocytes (TILs). PD-1 positive TILs are small and scatter among tumor cells. D) PD-1 expression on tumor cells. PD-1 expressing tumor cells are large and have atypical nuclei.



**HLA class II**     Positive                       Negative  
**miPD-L1**         Positive                       Negative  
**PD-1<sup>+</sup>TILs**     PD-1<sup>+</sup> TILs ≥ 10/hpf     PD-1<sup>+</sup> TILs < 10/hpf

**Supplemental figure 2. Association of HLA class II, PD-L1, and PD-1 expression.**

Heatmap comparing the expression patterns of human leukocyte antigen (HLA) class II, programmed death ligand 1 (PD-L1), and programmed cell death 1 (PD-1). White, negative or PD-1<sup>+</sup> tumor-infiltrating lymphocytes (TILs) < 10 per high power field (/hpf); gray, positive or PD-1<sup>+</sup> TILs ≥ 10/hpf.

**Supplemental Table 1. Chemotherapy regimens.**

<b>Regimen</b>	<b>HLA class II<sup>+</sup> (n=44)</b>	<b>%</b>	<b>HLA class II<sup>-</sup> (n=88)</b>	<b>%</b>	<b>p</b>
VCAP-AMP-VECP	14	31.8	24	27.2	0.5884
CHOP	7	15.9	25	28.4	0.1050
COP	4	9.1	11	12.5	0.5541
EPOCH	4	9.1	6	6.8	0.6462
VEPA	3	6.8	4	4.6	0.5898
Others	4	9.1	9	10.2	0.8354
No chemotherapy	8	18.2	9	10.2	0.2083

HLA, human leukocyte antigen; VCAP-AMP-VECP, vincristine, cyclophosphamide, doxorubicin, prednisone–doxorubicin, ranimustine, prednisone–vindesine, etoposide, carboplatin and prednisone; CHOP, cyclophosphamide, doxorubicin, vincristine, prednisone; COP, cyclophosphamide, doxorubicin, prednisone; EPOCH, etoposide, prednisone, vincristine, cyclophosphamide, doxorubicin; VEPA, vinblastine, etoposide, prednisone, doxorubicin; p, p-value.