dences may be forwarded to the editorial office in Bethesda, Maryland (see Information for Authors).

To the Editor-in-Chief:

I read with interest the recent study by Yabuki et al[1] concerning the immunohistochemical localization of DNA topoisomerase II in human gastric disorders. Although the authors state that immunolocalization of topoisomerase II in human tissues has not been extensively studied, I would like to draw their attention to previous work by us[2,3] and others[4] demonstrating the immunostaining pattern of topoisomerase II in frozen and formalin-fixed, paraffin-embedded human tissue sections by polyclonal and monoclonal topoisomerase II antibodies. In addition, I would like to point out that the topoisomerase II labeling index described by Yabuki et al[1] is essentially identical to our definition of a topo II index, which we described over two years ago.[2]

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To the Editor-in-Chief:

Patey et al[1] present data on intercellular adhesion molecule (ICAM)-3 expression on endothelial cells using immunohistochemistry on frozen tissue sections obtained from patients with various inflammatory diseases. These disorders include granulomatosis, skin graft-*versus*-host disease, colitis, heart transplant rejection, and vasculitis. Based on their observations showing no ICAM-3 expression on inflammatory endothelial cells in 31 of 34 tissue samples (99% negative tissues), the authors suggest that "ICAM-3 does not seem to play a role in the recruitment of leukocytes during inflammation. . . ."[1]

Table 1. *Expression of ICAM-3 on RA (n = 10), OA (n = 10), and Normal (n = 4) Synovial Tissue Endothelial Cells*

Subject	RA (%)	OA (%)	Normal (%)
1	80	40	10
2	20	30	1
3	20	20	1
4	20	10	0
5	15	5	
6	5	5	
7	2	2	
8	2	2	
9	1	1	
10	1	1	
Mean ± SEM	9.6 ± 3.0	11.6 ± 4.4	3.0 ± 2.3

As arthritis, in which leukocyte ingress through vascular endothelium into the synovium plays a crucial role, is not included in the studies reported by Patey et al, we would like to point out that we published some data showing ICAM-3 expression on 10% and 12% of endothelial cells in the rheumatoid arthritic (RA) and osteoarthritic (OA) synovium, respectively.[2] We found only minimal (approximately 3%) endothelial ICAM-3 expression in normal synovia. Our results were based on immunoperoxidase histochemistry carried out on synovial tissues taken from 10 RA patients, 10 OA patients, and 4 normal patients. The semiquantitative microscopic analysis we used was similar to that of Patey et al. However, we performed semiquantitative analysis using a 0 to 100% scale based on the percentage of positive cells, rather than Patey et al's 0 to 2 scale based on the determination of "positive" and "negative" sections. In our paper we presented our data as the mean (±SEM) percentage of immunoreactive vessels. To enable a comparison between our and Patey et al's method, we now show the results of the actual measurements obtained from each patient sample (Table 1). These data show that all arthritic and three of four normal synovia contained at least 1% ICAM-3-positive endothelial cells. All of these sections may be considered as "positive" according to Patey et al's description. Furthermore, 4 of 10 RA (40%) and 3 of 10 OA (33%) synovial samples

showed ICAM-3 expression on at least 20% of endothelial cells.

Based on our observations, we suggest that the role of endothelial ICAM-3 cannot be excluded in certain inflammatory diseases, at least in arthritis.

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Authors' Reply:

We would like to reply to Drs. Szekanecz and Koch's comments about our paper. We compared the expression of ICAM-3 with E-selectin and VCAM-1 on endothelial cells. We found that ICAM-3 was poorly expressed on vessels in some inflammatory diseases, except in granulomatosis, a specific type of inflammation, and that its expression was not correlated with the intensity of inflammatory infiltrates in contrast to the expression of E-selectin. However, we did not study all types of inflammatory processes such as rheumatoid arthritic and osteoarthritic synovium. In contrast we observed an expression of ICAM-3 on vessels in malignant and benign tumors. In hemangiomas, ICAM-3 expression was inversely correlated with the vessel maturity, strongly expressed within the immature areas, and weakly expressed within the mature areas. Therefore, our results suggest that ICAM-3 may play a role during pathological angiogenesis more than in inflammatory processes. VCAM-1 and E-selectin, known to induce the recruitment of leukocytes into tissues during inflammation, were recently demonstrated *in vitro* to directly promote angiogenesis. Inversely, ICAM-3 might play a role in specific inflammatory processes such as in the granulomatosis, rheumatoid arthritic, and osteoarthritic synovium, but it does not seem, until now, that it was the major role of ICAM-3. It will be interesting to compare the expression of ICAM-3 on endothelial cells with E-selectin and VCAM-1 in rheumatoid arthritic and osteoarthritic synovium. All of these results are not in opposition, but further investigations are needed to evaluate the precise role of ICAM-3.

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