

Corrigendum

Sangeeta Mehta, Rakhee Chhetra, Radhika Srinivasan, Suresh C. Sharma, Digambar Behera and Sujata Ghosh*

Corrigendum to: Potential importance of *Maackia amurensis* agglutinin in non-small cell lung cancer

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Corrigendum to: Sangeeta Mehta, Rakhee Chhetra, Radhika Srinivasan, Suresh C. Sharma, Digambar Behera and Sujata Ghosh; Potential importance of *Maackia amurensis* agglutinin in non-small cell lung cancer. *Biol. Chem.*, Volume 394, Issue 7, 2013, pages, 889–900 (DOI: 10.1515/hsz-2012-0279):

The concentration of lectins (*Maackia amurensis* agglutinin & *Sambucus nigra* agglutinin) have been erroneously specified in units of μM whereas it should be nM. The corrected units in text and figure appears below.

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The apoptotic index of NCI-H460 cells (Figure 3A) and NCI-H520 cells (Figure 3B) was at the maximum at a 4 nM dose of *Maackia amurensis* agglutinin, which was down-regulated at higher doses.

***Corresponding author: Sujata Ghosh**, Postgraduate Institute of Medical Education and Research (PGIMER), Department of Experimental Medicine and Biotechnology, Chandigarh 160012, India, e-mail: suassi1@gmail.com; sujataghosh12@gmail.com

Sangeeta Mehta and Suresh C. Sharma: Postgraduate Institute of Medical Education and Research (PGIMER), Department of Radiotherapy, Chandigarh 160012, India

Rakhee Chhetra: Postgraduate Institute of Medical Education and Research (PGIMER), Department of Experimental Medicine and Biotechnology, Chandigarh 160012, India

Radhika Srinivasan: Postgraduate Institute of Medical Education and Research (PGIMER), Department of Cytology and Gynaecological Pathology, Chandigarh 160012, India

Digambar Behera: Postgraduate Institute of Medical Education and Research (PGIMER), Department of Pulmonary Medicine, Chandigarh 160012, India

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The percentage of apoptotic cells was significantly higher ($p < 0.01$) in cells [$47 \pm 5.1\%$ for NCI-H460 and $54 \pm 5.2\%$ for NCI-H520] cultured for 24 h in the presence of 4 nM lectin as compared to the respective control cells.

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When both the cell lines were incubated for 12 h with the lectin (4 nM), the extent of apoptosis was found to be comparable to that of the respective control, while 24 h and 36 h incubation increased the apoptotic index to ~ 2.5 -fold and ~ 4 -fold, respectively. As 24 h of incubation of both the NSCLC cell lines with the 4 nM dose of *Maackia amurensis* agglutinin was sufficient for inducing an appreciable extent of apoptosis, this dose of the lectin for 24 h was used for the induction of apoptosis in both the cell lines ($5 \times 10^4 / 500 \mu\text{l}$) in the subsequent experiments. The apoptotic index of normal lung fibroblast cells (WI-38) cultured for 24 h in presence of 4 nM dose of *Maackia amurensis* agglutinin was found to be comparable to that of the untreated cells.

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We observed that pre-incubation of the lectin (4 nM) with GM2 (0.78 ng/ml) resulted in a decrease in the apoptotic index by 42% and 39% in NCI-H460 cells and NCI-H520 cells, respectively. The apoptotic index of NCI-H460 and NCI-H520 cells was found to be reduced by 45% and 46% respectively, when the cells were treated with the lectin (4 nM) pre-incubated with IgG_{MAA} (Figure 4B).

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Figure 4 (A) Apoptosis induced by *Maackia amurensis* agglutinin (4 nM) in NCI-H460 cells and NCI-H520 cells at various time periods.

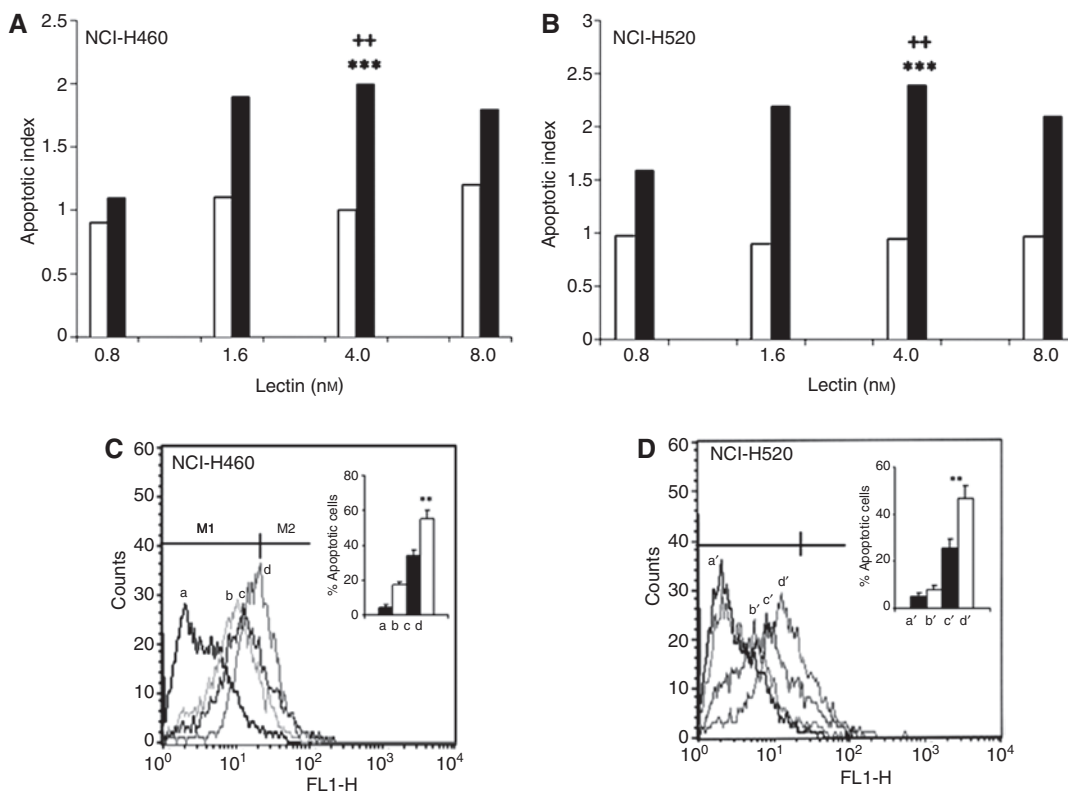


Figure 3: Apoptosis induced by *Maackia amurensis* agglutinin (■) and *Sambucus nigra* agglutinin (□) in NCI-H460 cells. (A) and NCI-H520 cells, (B) at 24 h.

The apoptotic index was evaluated by CDD-ELISA. *** $p < 0.01$ vs. cells treated with 0.8 nM of *Maackia amurensis* agglutinin; ** $p < 0.01$ vs. cells treated with 4 nM of *Sambucus nigra* agglutinin; one way ANOVA *Post Hoc* Dunnett test. Representative histograms of FACS analysis of *Maackia amurensis* agglutinin treated (C) NCI-H460 cells and (D) NCI-H520 as evaluated by APO-Direct Kit. Cells only (a, a'), cells cultured in presence of 0.8 nM lectin (b, b'), 1.6 nM lectin (c, c') and 4 nM lectin (d, d'); Inset: Graphical representation of the lectin-induced apoptosis in both the cell lines. ** $p < 0.01$ vs. untreated cells. One way ANOVA *Post Hoc* Dunnett test. Each bar represents mean \pm SD of values obtained from three independent experiments performed in duplicate.

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Briefly, the NSCLC cells ($5 \times 10^4/500 \mu\text{l}$) were cultured in serum-free media in the absence and presence of different doses (0.8–8 nM) of *Maackia amurensis* agglutinin for 24 h.

Briefly, the cells were cultured in the absence and presence of different doses (0.8–4 nM) of *Maackia amurensis* agglutinin for 24 h, washed and fixed in 1% paraformaldehyde for 15 min at 4°C.