LETTER TO THE EDITOR
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The proliferation and differentiation of pre-osteoblastic MC3T3-E1 cells from Vietnamese drug formulations

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DEAR EDITORS

A public health problem, osteoporosis, is recognized as the prevalent disease, and mainly causes for impairment and loss mass of bone. It closely related the balance between bone formation by osteoblasts and resorption by osteoclasts during the remodeling cycle of bone.1,2 Hence, pharmaceutical therapies are looking for the potential agents to stimulate osteoblastic bone formation, as well as inhibit osteoclastic processes.3

In Vietnamese traditional medicine, the combination of the three species, including Dillenia Indica (local name “So”), Schefflera racemosa (local name “May tang”), Adiantum raddianum (local name “Cut nich”), were widely used as a herbal drug of osteoarthrits by several ethnic minorities in the mountainous areas of Lao Cai-Vietnam. However, up to now, no studies improve the roles of these crucial medicinal herbal plants. In current paper, we set out to investigate the effects of Vietnamese drug formulations of three plants on the proliferation and differentiation of pre-osteoblastic MC3T3-E1 cells through golden gate the effects of Vietnamese drug formulations of these herbal plants. In current paper, we set out to investigate the proliferation and differentiation of pre-osteoblastic MC3T3-E1 cells from Vietnamese drug formulations, Discovery Phytomedicine 6(4): 172-173. DOI: 10.15562/phytomedicine.2019.96


Table 1

<table>
<thead>
<tr>
<th>Concentration (mg/µL)</th>
<th>ALP activity (%)</th>
<th>Collagen content (%)</th>
<th>Mineralization (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>119.70 ± 3.94**</td>
<td>124.55 ± 6.74**</td>
<td>128.65 ± 5.02**</td>
</tr>
<tr>
<td>50</td>
<td>107.49 ± 0.61*</td>
<td>105.83 ± 5.56</td>
<td>114.38 ± 2.74*</td>
</tr>
<tr>
<td>0</td>
<td>100.00 ± 0.94</td>
<td>100.00 ± 0.85</td>
<td>100.00 ± 2.89</td>
</tr>
</tbody>
</table>

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*P < 0.05, **P < 0.01 versus control (only MC3T3-E1)
The proliferation and differentiation ... (2 : 1 : 1, D. Indica : S. racemosa : A. raddianum) evidently generated the prospective values in the treatment of bone related diseases. Therefore, extensive researches in either further biological experiments or phytochemical investigations are expected.

ACKNOWLEDGEMENTS
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REFERENCE

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