5. Types of icon in pictograms

	**Recommendation** **"Anthropomorphic icons or geometric icons may be used when pictograms are used as a supplement."** Agreed: 9, Disagreed: 1, Abstentions: 2 **Quality of the evidence:** low quality

Comment on the recommendation:

The recommendation refers to the comparison of various types of icons in pictograms. Various geometric forms were compared with each other (e.g. blocks and dots), and geometric icons were compared with anthropomorphic icons (e.g. figures and photos).

In this comparison, no effect could be shown for the cognitive outcomes *knowledge* (two studies: figurative vs. geometric; blocks vs. dots) and *comprehensibility / readability* (three studies: figurative vs. geometric; blocks vs. dots; shaded vs. unshaded). For the outcomes *understanding / risk perception*, a positive effect for using anthropomorphic icons was found in one of four studies. In the other three studies no difference was found between the groups (figurative vs. geometric; blocks vs. dots; shaded vs. unshaded).

In three out of five studies, positive effects were seen with regard to the affective outcomes *acceptance / attractiveness* when using anthropomorphic icons. One study showed a positive effect for shaded blocks compared to unshaded ones. In a further study, no significant difference was found for blocks vs. dots. For the outcomes *trust / credibility* no effect was seen (figurative vs. geometric) in another study.

Summary of the findings

Characteristics of the included studies

For this comparison five studies were included with a total of 2,232 participants. Healthy people (23, 24), students (25), patients of both sexes (19) and people with a low educational standard (26) were included, the average age being between 20 and

58 years. The studies were carried out in the USA (19, 23), Australia (25, 26) and Germany (24). The interventions consisted of representations concerning the benefits and harm of treatments (24, 26), survival rates (25, 26) and risks of diseases (19, 23, 24). Pictograms with various types of icons were compared: blocks and dots, shaded and unshaded, geometric and anthropomorphic, for example figures, human contours or photos.

Results for the relevant outcomes

In one study a positive effect for anthropomorphic icons was recorded concerning the outcomes *understanding / risk perception* (23). In the other studies, no effect for the outcomes *understanding / risk perception*, *knowledge* and *comprehension / readability* was found, whether in the comparison between various geometric forms or in the comparison with anthropomorphic icons (24-26). Regarding the outcomes *acceptance / attractiveness*, a positive effect for the use of anthropomorphic icons was shown (19, 23, 24). No significant difference was seen for the comparison of anthropomorphic icons with geometric icons with regard to the outcome *trust / credibility*.