

Evidence Map on the Clinical Effectiveness of Anthroposophic Medicine

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CABSIN
BRAZILIAN ACADEMIC
CONSORTIUM FOR
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About this Evidence Map

With the financial support of Mahle Institute and the support of a working group, the Brazilian Academic Consortium for Integrative Health (CABSIN) and the Latin American and Caribbean Center on Health Information (BIREME/PAHO/WHO) conducted the development of this Evidence Map having as the main methodological reference the Evidence Gap Map 3iE - International Initiative.

The Evidence Map on the Clinical Effectiveness of Anthroposophic Medicine is available in the VHL MTCI Americas.

<https://public.tableau.com/app/profile/bireme/viz/medicina-antroposofica-en/evidence-map>

About this Executive Report

This report consolidates the main evidence on interventions and health outcomes analyzed in the review studies included in the Evidence Map on the Clinical Effectiveness of Anthroposophic Medicine.

The contents of this report are the sole responsibility of the authors Consórcio Acadêmico Brasileiro de Saúde Integrativa (CABSIN) and Biblioteca Regional de Medicina (BIREME/PAHO) and do not represent the views of the Pan American Health Organization (PAHO/WHO) or the Brazilian Ministry of Health. Any errors and omissions are also the sole responsibility of the authors.

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■ Dried leaves of
Viscum album.



Introduction

This map presents an overview of the evidence on the clinical effectiveness of anthroposophic medicine for different health outcomes: Well-Being and Quality of Life, Health Care, Cancer, Physiological and Metabolic Indicators, Other Pathological Conditions. Anthroposophic medicine (AM) is an integrative multimodal treatment system based on a holistic understanding of the human being, nature, disease, and treatment. Anthroposophic therapy uses mineral, vegetable and animal medicines characterized as dynamized anthroposophic medicines by the Brazilian regulatory body ANVISA, besides its own therapies such as Eurythmy, Rhythmic Massage, Biographical Counseling, Psychotherapy, Art Therapy, among others. Since 2006, MA is one of the Complementary and Integrative Health Practices included in the Brazilian Unified Health System (SUS) through the National Policy of Integrative and Complementary Practices (PNPIC), which calls it Anthroposophy applied to Health because of its multiprofessional nature.

■ Leaves, flowers,
and fruits of
Viscum album.



The method

The study was based on the Evidence Gap Map methodology adapted by BIREME/PAHO/WHO, which consists of graphically representing the characteristics and findings of the evidence in review studies associating interventions with the outcomes analyzed in these studies, as well as linking the reported effects of the interventions with the population and country focus of the primary studies included in the reviews.

On the map, associations are represented by bubbles of different colors representing the effect (positive, positive potential, inconclusive) and confidence level (high, moderate, low, or critically low) of the reported evidence. The size of the bubble is equivalent to the number of studies that analyzed the association. All bubbles lead to the list of study titles with links to the full text.

Systematic review studies, with or without meta-analysis, scoping and similar reviews that could answer the research question were eligible for inclusion in the Evidence Map:

How effective is anthroposophical medicine for health outcomes?

■ Flowers from
Arnica montana.



Main findings

From an extensive literature search conducted in the VHL, PUBMED, EMBASE and CINAHL, 33 research studies (4 systematic reviews with meta-analysis, 1 systematic review of randomized controlled trials, 19 systematic reviews, 3 meta-analyses, 1 qualitative systematic review and 5 scoping and similar reviews) published until June 2022 were selected and included in the Map, most of them (n=19) in the last 12 years.

Based on methodological quality assessment (AMSTAR 2 tool) studies were classified by **confidence level** for reported results: High (n = 10), Moderate (n=2), Low (n=8) and Critically Low (n=7). In 6 studies the tool was not applied because they were qualitative or non-systematic reviews. All studies were assessed, characterized, and categorized by a group of researchers in the field of Anthroposophic Medicine.

The 33 studies included in the Map evaluated the effect for three groups of **Interventions** (with subdivisions): **Anthroposophic Medicines** (*Viscum album* and other medicines), **Anthroposophic Therapies** (Eurythmy and other therapies) and **Multimodal Therapies** (In general). *Viscum album* intervention was the most analyzed (n=22 studies), followed by other medicines (n=4), Multimodal Therapies (n=4), Eurythmy (n=2) and other therapies (n=1).

These forms of intervention were associated with 19 health outcomes distributed in 5 groups: **Well-Being and Quality of Life, Cancer, Health Care, Physiological and Metabolic Indicators, Other Pathological Conditions.**

Considering the specific clinical outcomes within the Outcome Groups we highlight:

In the **Well-Being and Quality of Life** group:

- » Quality of Life
- » Physical Well-Being
- » Psychological Well-Being

In the **Cancer** group:

- » Head and Neck Cancer
- » Breast Cancer
- » Gynecological Cancer
- » Cancer-Related Fatigue
- » Cancer Remission
- » Chemotherapy and Radiotherapy-Related Symptoms
- » Symptoms of Cancer
- » Survival

In the **Health Care** group:

- » Treatment Outcome
- » Patient Satisfaction
- » Patient Safety

In the **Physiological and Metabolic Indicators** group:

- » Immunological Biomarker
- » Cardiorespiratory Coordination
- » Edema

In the **Other Pathological Conditions** group:

- » Respiratory Infections
- » Gastrointestinal Disorders

In total, there were 63 associations between interventions and outcomes, considering that the same intervention can be applied to more than one outcome and vice versa.

Among the **outcome** groups, the ***Viscum album*** group received 76% of the associations (n=48), followed by the **Multimodal Therapies** group (n=8). Among all outcomes, the following were noteworthy: **Quality of Life** (n=12), **Survival** (n=9), **Patient Safety** (n=8), **Chemotherapy and Radiotherapy-Related Symptoms** (n=7).

Excluding the *Viscum album* intervention, multimodal interventions, other medications, and Eurythmy were noteworthy. The outcomes related to these interventions focused on the outcome of these treatments, patient satisfaction, and patient safety.

The studies reported a positive **effect** (n=27 outcomes), followed by positive potential (n=21 outcomes) and inconclusive (n=15 outcomes) for the interventions/outcomes analyzed.

Regarding the **focus country**, which indicates where the primary studies included in the reviews were conducted, 7 countries are listed in most of the 33 studies included in the map: Germany with 13 citations, China with 9 citations, Italy, and Russia with 8 citations, and Bulgaria, South Korea and Ukraine with 7 citations each. 18 studies did not report the focus country.

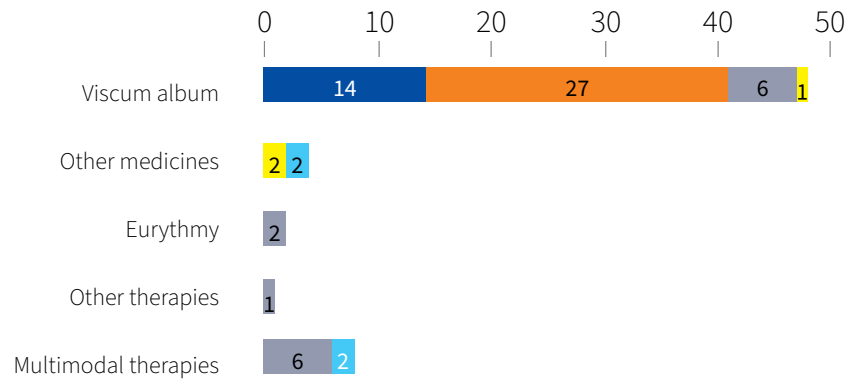
As for the **population** studied in the studies, most occurred in individuals with cancer (23 studies), patients in general (15 studies), and adults (7 studies).

Interventions for the outcome groups

The 33 studies included in the Map evaluated the effect of interventions with anthroposophic medicine for 19 health outcomes distributed in 5 groups: **Well-Being and Quality of Life, Cancer, Health Care, Physiological and Metabolic Indicators, Other Pathological Conditions**. In all, there were 63 associations between interventions and outcomes considering that the same intervention can be applied to more than one outcome and vice-versa (Figure 1).

Figure 1

Distribution of
Intervention Groups by
Outcome Groups.



Group 1 - Well-Being and Quality of Life

The 3 outcomes of the Well-Being and Quality of Life group received 14 associations (22%), especially Quality of Life associated with the anthroposophic medicine *Viscum album* (n=12) (Figure 2). Of these 14 associations, 7 reported positive effects (confidence level: 3 high, 1 moderate, 3 critically low). Five reported positive potential effects (confidence level: 2 high, 1 low, and 2 no evaluation applied). And 2 reported inconclusive effects (confidence level: both low). (Figure 3)

The main outcome of this category was Quality of Life with 12 associations.

Figure 2
Distribution of associations by effect of the Interventions for Well-Being and Quality of Life.

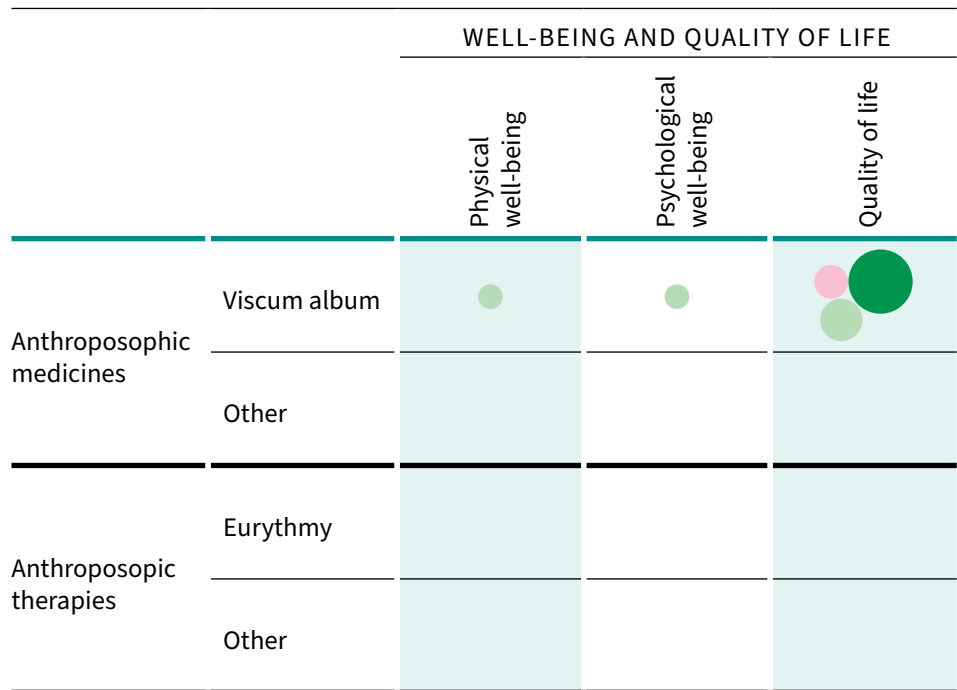
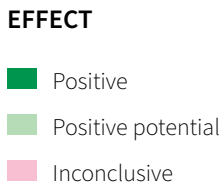
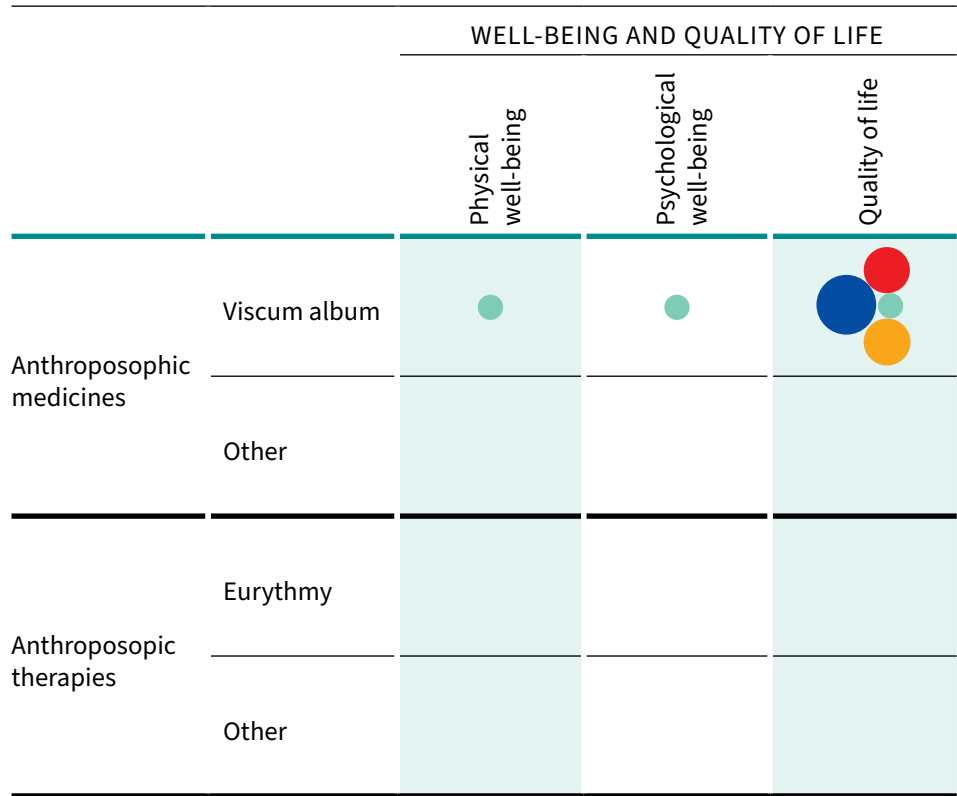


Figure 3

Distribution of associations by confidence level of Interventions for Well-Being and Quality of Life.

CONFIDENCE LEVEL

- High
- Moderate
- Low
- Critically low
- N/A



Group 2 - Cancer

The 8 outcomes of this group received 27 associations (43%), highlighting the 22 *Viscum album* reviews (Figure 4). Of these 27 associations, 6 reported a positive effect (confidence level: 4 high, 1 moderate, 1 critically low). Thirteen reported a positive potential effect (confidence level: 4 high, 2 moderate, 2 low, 2 critically low, and 3 not evaluated). And 8 reported inconclusive effects (confidence level: 4 high, 3 low, and 1 not evaluated). (Figure 5)

The main outcomes in this category were **Survival** with 9 associations and **Chemotherapy and Radiotherapy-Related Symptoms** with 7 associations.

Figure 4

Distribution of associations by effect of Interventions for Cancer.

EFFECT

- Positive
- Positive potential
- Inconclusive

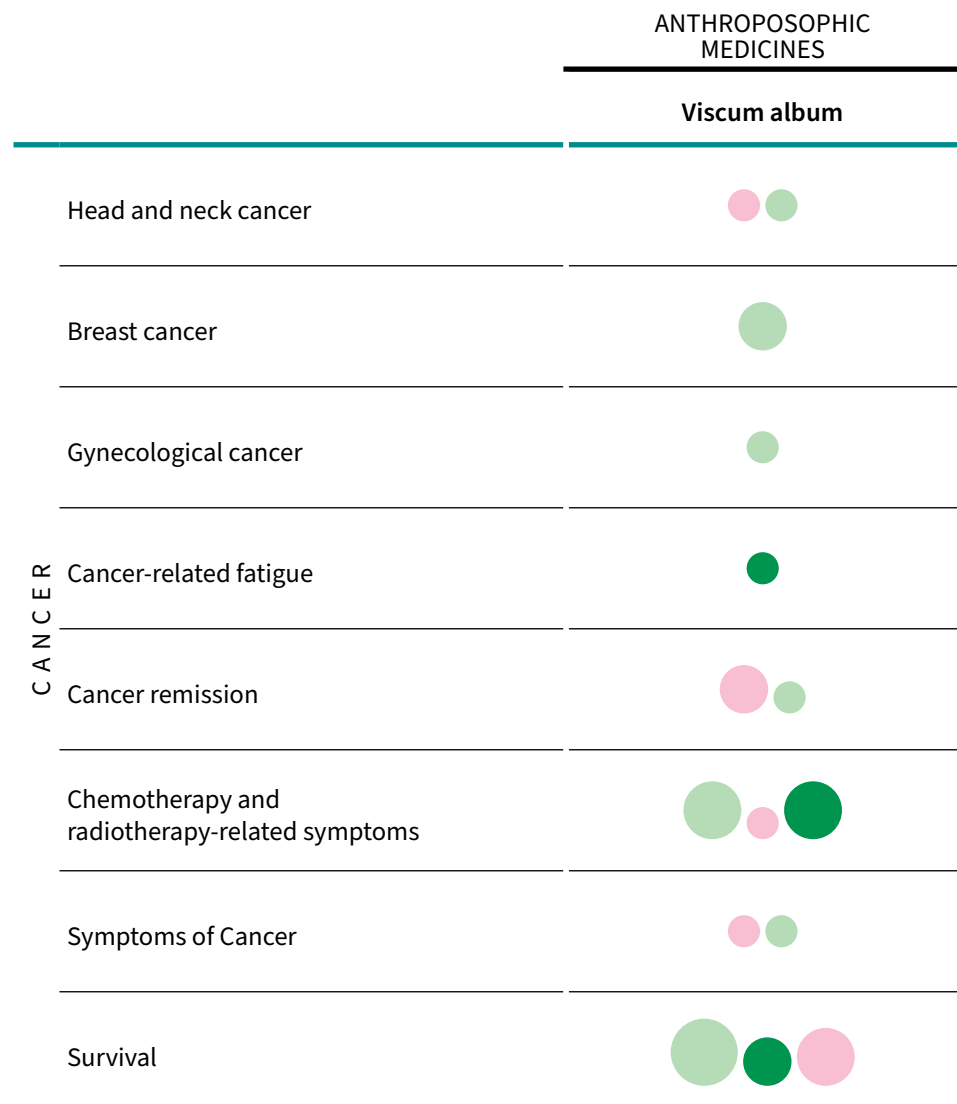
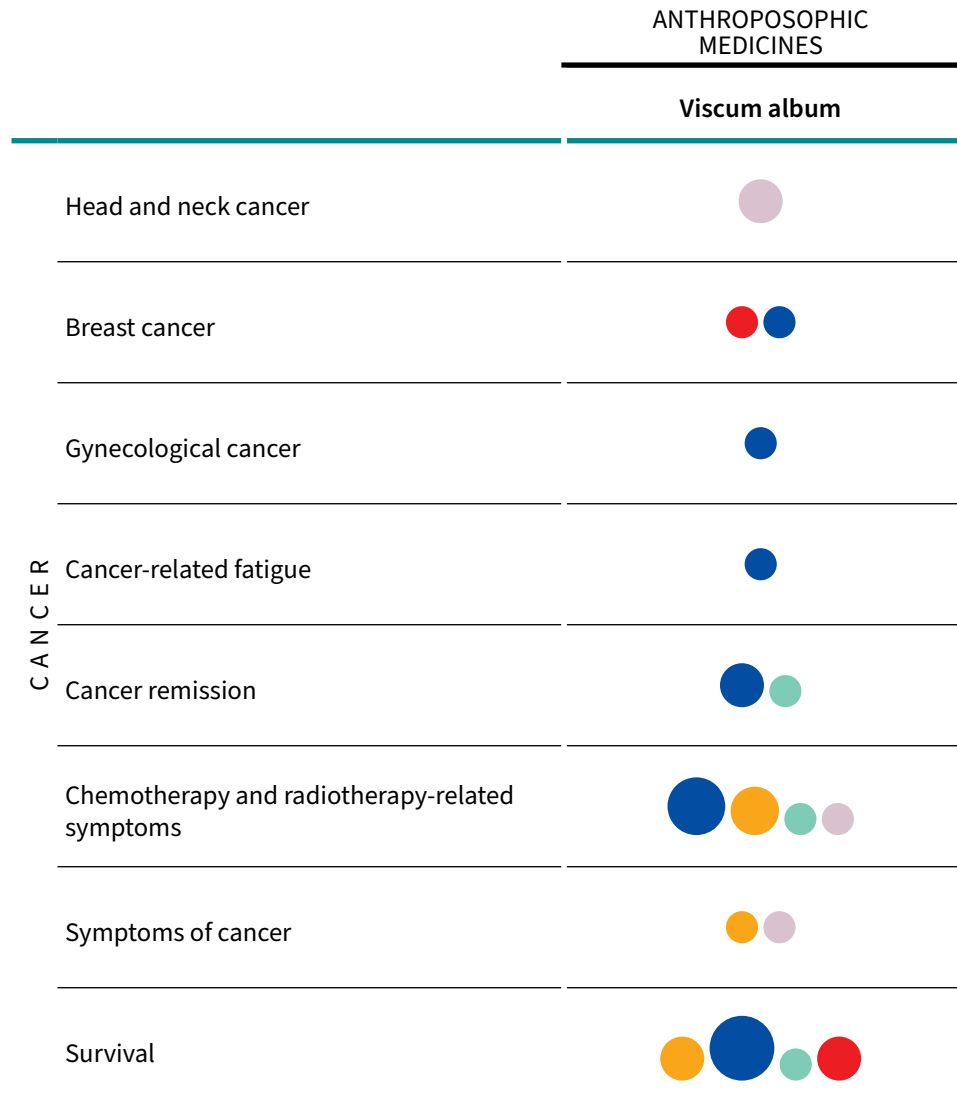


Figure 5
Distribution of associations by Confidence Level of the Interventions for Cancer.

CONFIDENCE LEVEL

- High
- Moderate
- Low
- Critically low
- N/A



Group 3 - Health Care

The 3 outcomes in the **Health Care group** received 15 associations (24%): Patient Safety (n=8), Treatment Outcome (n=5) and Patient Satisfaction (n=2). These outcomes were related to Multimodal Therapies (n=6), *Viscum album* (n=6), Eurythmy (n=2) and other therapies (n=1). (Figure 6)

Of these 15 associations, 11 reported a positive effect (confidence level: 8 high, 1 moderate, 1 low, 1 critically low), 2 reported a positive potential effect (confidence level: 1 moderate, 1 low), and 2 reported an inconclusive effect (confidence level: 1 low and 1 not evaluated) (Figure 7).







The main outcomes of this category were **Patient Safety** with 8 associations and **Treatment Outcome** with 5 associations.

Figure 6

Distribution of associations by effect of Health Care Interventions.

EFFECT

- Positive
- Positive potential
- Inconclusive

		HEALTH CARE		
		Treatment outcome	Patient satisfaction	Patient safety
Anthroposopic medicines	Viscum album			
	Other			
Anthroposopic therapies	Eurythmy			
	Other*			
Multimodal therapies	In general			

* Oil-dispersion bath



Figure 7

Distribution of associations by confidence level for Health Care Interventions.

CONFIDENCE LEVEL

- High
- Moderate
- Low
- Critically low
- N/A

		HEALTH CARE		
		Treatment outcome	Patient satisfaction	Patient safety
Anthroposopic medicines	Viscum album			
	Other			
Anthroposopic therapies	Eurythmy			
	Other*			
Multimodal therapies	In general			

* Oil-dispersion bath

Group 4 - Physiological and Metabolic Indicators

The 3 outcomes of the **Physiological and Metabolic Indicators** group received 3 associations (5%), related to *Viscum album* and other drugs (Cardiodoron® - *Onopordum acanthium*, *Hyoscyamus niger* and *Primula veris* - and *Arnica montana*) (Figure 8). Of these 3 associations, 2 reported a positive effect (confidence level: 1 high and 1 not evaluated) and one showed an inconclusive effect (confidence level: critically low) (Figure 9). The main outcomes in this category were **Immunological Biomarkers**, **Cardiorespiratory Coordination** and **Edema** with 1 association each.

Figure 8
Distribution of associations by effect of Interventions for Physiological and Metabolic Indicators.

EFFECT

- Positive
- Inconclusive

		Anthroposophic medicines		Anthroposophic therapies		Multimodal therapies
		Viscum album	Other*	Eurythmy	Other	In general
PHYSIOLOGICAL AND METABOLIC INDICATORS	Immunological biomarkers	●				
	Cardiorespiratory coordination		●			
	Edema		●			

* Cardiodoron™, *Arnica montana*

Figure 9
Distribution of associations by confidence level of Interventions for Physiological and Metabolic Indicators.

EFFECT

- High
- Critically low
- N/A

		Anthroposophic medicines		Anthroposophic therapies		Multimodal therapies
		Viscum album	Other*	Eurythmy	Other	In general
PHYSIOLOGICAL AND METABOLIC INDICATORS	Immunological biomarkers	●				
	Cardiorespiratory coordination		●			
	Edema		●			

* Cardiodoron™, *Arnica montana*

Group 5 – Other Pathological Conditions

Other 2 outcomes in the **Other Pathological Conditions** group received 4 associations (6%), related to **Multimodal Therapies** (n=2), and other medications (n=2) (Figure 10).

Of these 4 associations, 1 reported a positive effect (confidence level: not assessed), 1 reported a positive potential effect (confidence level: critically low), and 2 reported an inconclusive effect (confidence level: both critically low) (Figure 11).

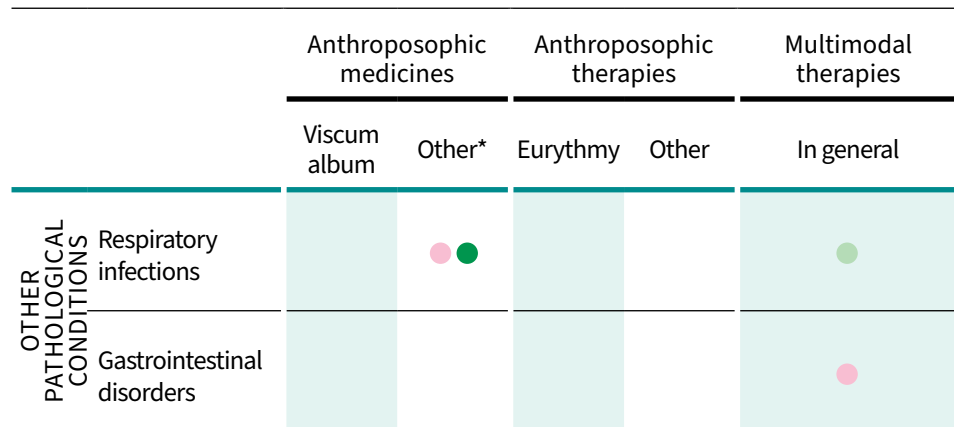
The main outcomes of this category were **Respiratory Infections** with 3 associations.

Figure 10

Distribution of associations by effect of Interventions for Other Pathological Conditions.

CONFIDENCE LEVEL

- Positive
- Positive potential
- Inconclusive



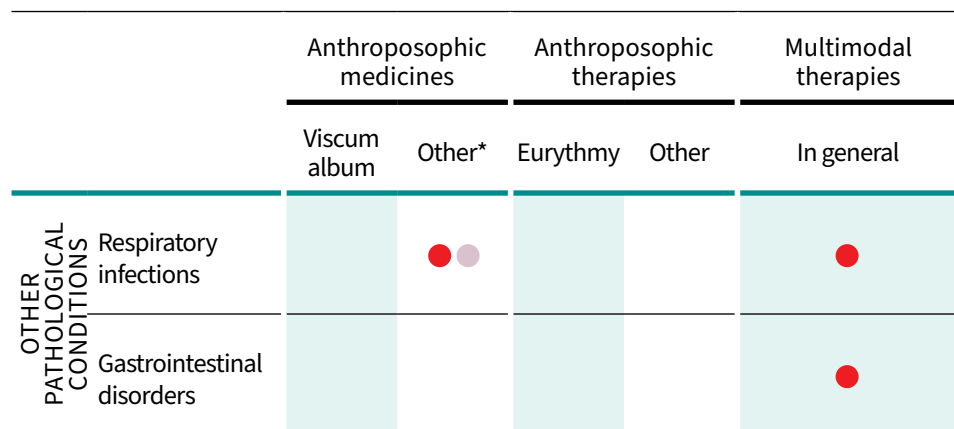
* *Aconitum, Bryonia, Spongia* and others

Figure 11

Distribution of associations by confidence level of Interventions for Other Pathological Conditions.

CONFIDENCE LEVEL

- Critically low
- N/A



* *Aconitum, Bryonia, Spongia* and others

Implications for practice and research

Anthroposophic medicine appears to be beneficial for several health outcomes, most notably oncology.

Among the associations (interventions/outcomes) with a positive effect (n=27, 43%) and a positive potential effect (n=21, 33%), the most noteworthy were the outcomes:

» Oncology

- ▶ **Quality of Life** associated with the use of the anthroposophic drug *Viscum album* with a positive effect (n=7) and positive potential effect (n=3).
- ▶ Control of **Chemotherapy and Radiotherapy-Related Symptoms** with positive effect (n=3) and with positive potential effect (n=3).
- ▶ **Patient Safety** with a positive effect (n=7), of which 5 reviews are related to the use of *Viscum album*
- ▶ Improved **Cancer Survival** with positive (n=2) and positive potential (n=4) effects
- ▶ Reduction of **Cancer-Related Fatigue** with positive effect (n=1).
- ▶ Specific benefit for **Breast Cancer** (n=2), **Gynecological Cancer** (n=1) and **Head Cancer** (n=1) with positive potential effect.

» Respiratory infections

- ▶ Benefit for the treatment of **respiratory infections**, both upper airway infections and pneumonias, with positive and positive potential effect (n=2), evaluating anthroposophic drugs (n=1) and from multimodal anthroposophic treatment (n=1).

» Anthroposophical Medicine as a whole

- ▶ Positive effects were identified (n=2) evaluating anthroposophic multimodal therapy on the outcomes **Treatment Outcome, Patient Satisfaction** and **Patient Safety**.
- ▶ Positive potential effect of **Eurythmy**, a movement-based non-medicine therapy, for overall **Treatment Outcome** (n=2).

Among the outcomes with inconclusive effect (n=15, 24%), **Cancer Survival** (n=3) was one of them. No studies with no effect or negative effects were identified.

Although the effect of the interventions on the various outcomes was mostly positive and positive potential, methodological refinement of the studies is recommended to improve the quality of the evidence reported on the effectiveness of anthroposophic medicines and therapies.

- Artistic Eurythmy movements (image courtesy of Mahle Institute).



Implications for management

It is expected that the associations identified may promote the implementation of anthroposophic medicine and its therapies by managers and health professionals in the health services of the Brazilian National Health System, especially for the outcomes that showed positive and positive potential effects.

■ Dried leaves of *Viscum album*.



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