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Guidelines Breast
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FORSCHEN
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Diagnostik und Therapie früher und fortgeschrittener Mammakarzinome

Komplementäre Therapie „Survivorship“

Screened Data Sources:

Pubmed	2012 - 01/2020
ASCO	2015 – 2019
SABCS	2015 – 2019
EBCC	2015 – 2019
Cochrane library:	summary Jan. 2020:



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Komplementäre Therapien

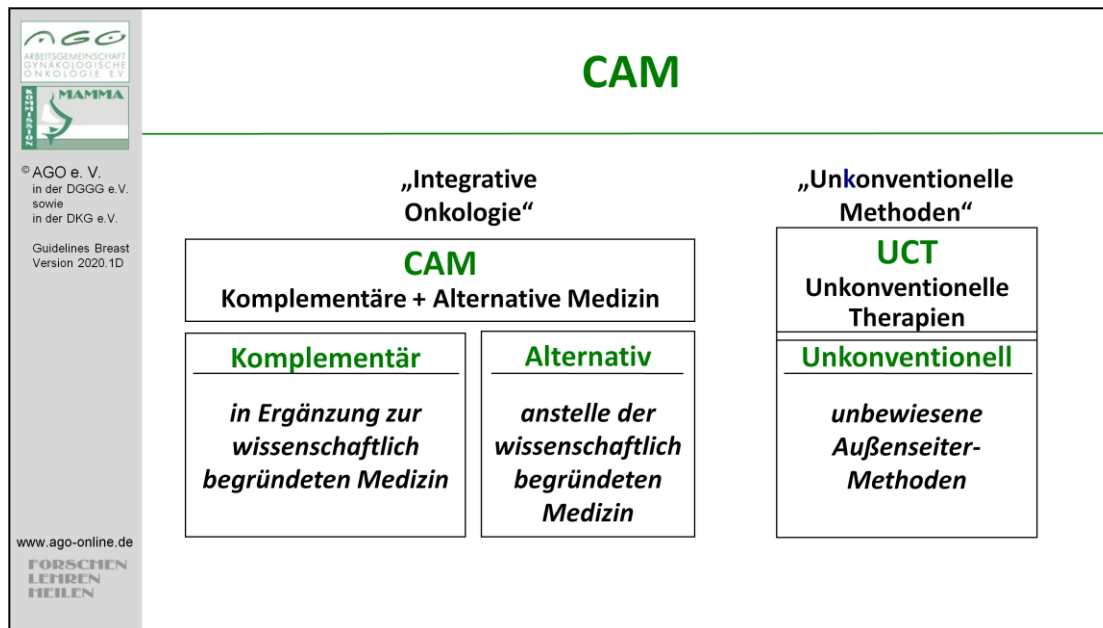
Hormontherapie „Survivorship“ (Rezidiv-Prävention)

- **Versionen 2002–2019:**
 Albert / Bauerfeind / Blohmer / Fersis / Friedrich / Gerber / Göhring
 / Hanf / Janni / Kümmel / Lück / von Minckwitz / Nitz / Oberhoff /
 Rhiem / Scharl / Schmidt / Schütz / Thomssen

- **Version 2020:**
 Kümmel / Schütz

Screened Data Sources:

Pubmed	2012 - 01/2020
ASCO	2015 – 2019
SABCS	2015 – 2019
EBCC	2015 – 2019
Cochrane library:	summary Jan. 2020:




Komplementäre Verfahren werden parallel zur konventionellen Therapie angewendet und unterscheiden sich von alternativen Verfahren dadurch, dass sie den Wert der konventionellen Verfahren nicht in Frage stellen, sondern sich als Ergänzung verstehen

Onkoleitlinienprogramm

1. Witt CM et al.. A Comprehensive Definition for Integrative Oncology. J Natl Cancer Inst Monogr (2017) 2017(52): lgx012

“Integrative oncology is a patient-centered, evidence-informed field of cancer care that utilizes mind and body practices, natural products, and/or lifestyle modifications from different traditions alongside conventional cancer treatments. Integrative oncology aims to optimize health, quality of life, and clinical outcomes across the cancer care continuum and to empower people to prevent cancer and become active participants before, during, and beyond cancer treatment.”



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Allgemein

		Oxford		
		LoE	GR	AGO
▪	CAM anstelle lokoregionärer Interventionen	2b	B	--
▪	CAM anstelle systemischer Therapie	2b	B	--
▪	Patienten sollten nach ihrer Nutzung von komplementären und alternativen Therapien befragt werden.			
▪	Diagnostische Verfahren im Zusammenhang mit komplementären und alternativen Therapiekonzepten ohne Evidenz (z.B. Irisdiagnostik, Bioresonanz) sollen nicht empfohlen werden.			
▪	Unter Systemtherapie: Besondere Beachtung gilt möglichen Medikamenteninteraktionen			

1. Saquib J, Parker BA, Natarajan L, et al. Prognosis following the use of complementary and alternative medicine in women diagnosed with breast cancer. *Complement Ther Med*. 2012 Oct;20(5):283-90. doi: 10.1016/j.ctim.2012.04.002. Epub 2012 Apr 27.
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6. Smith PJ et al.. Complementary and alternative medicine use by patients receiving curative-intent chemotherapy. *Asia-Pacific Journal of Clinical Oncology* 2016; 12: 265–274
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Statement zu diagnostischen Verfahren: analog S3-Leitlinie, Konsensbasierte Empfehlung 6.53, S. 302

	Oxford		
	LoE	GR	AGO
Komplementäre Therapien prä- und postoperativ			
Präoperativ			
■ Hypnose (reduziert Ängste, Schmerz, Übelkeit)	1b	B	+
Postoperativ			
■ Akupunktur			
■ bei Schmerzen, Ängstlichkeit	1b	B	+/-
■ bei Übelkeit, Erbrechen	2b	B	+
■ Massage Therapie (bei Schmerzen)	2b	C	+/-
■ Frühzeitige postoperative Bewegungstherapie beugt Dysfunktion der oberen Extremität vor CAVE: vermehrt Wundsekret	1a	A	+
■ Körperliche Aktivität			
■ zur Reduktion des sek. Lymphödems	1a	A	+
■ zur Prophylaxe eines Lymphödems	1b	B	+/-
■ Prophylaktische Lymphdrainage	1b	B	-
■ Yoga (bei Arm- und Schulterschmerzen)	2b	C	+
■ Musiktherapie (Schmerzreduktion nach Mastektomie)	2b	C	+/-

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Acupuncture and Postoperative Nausea and Vomiting / Pain

1. Mallory MJ et al.: Acupuncture in the postoperative setting for breast cancer patients: a feasibility study. *Am J Chin Med*. 2015;43(1):45-56.
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Massage Therapy

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Postoperative exercise

1. De Groef A, Van Kampen M, Dieltjens E, et al. Effectiveness of postoperative physical therapy for upper-limb impairments after breast cancer treatment: a systematic review. *Arch Phys Med Rehabil*. 2015 Jun;96(6):1140-53. doi: 10.1016/j.apmr.2015.01.006. Epub 2015 Jan 13. Review.
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Reduction secondary lymphedema

1. Baumann FT, Reike A, Reimer V et al: Effects of physical exercise on breast cancer –related secondary lymphedema : a systematic review Br Ca res Treatment 2018; 170: 1-13

Prevention lymphedema

1. Ammitzbøll G, Johansen C, Lanng C, Andersen EW et al.. Progressive resistance training to prevent arm lymphedema in the first year after breast cancer surgery: Results of a randomized controlled trial. Cancer. 2019 May 15;125(10):1683-1692. doi: 10.1002/cncr.31962. Epub 2019 Jan 11.
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Prophylactic lymph drainage

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Music therapy

1. Li, X.M., Yan H, Zhou KN, et al. Effects of music therapy on pain among female breast cancer patients after radical mastectomy: results from a randomized controlled trial. Breast Cancer Res Treat, 2011. 128(2): p. 411-9.
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Komplementäre Therapien

Behandlungsphase – Einfluss auf Toxizität I

Bei laufender onkologischer Standardtherapie:
CAVE: Interaktionen beachten!

- **Mistellektine (Viscum album)**
zur Reduktion therapieassoziierter Nebenwirkungen
- **Thymuspeptide**
verringern Risiko schwerer Infektionen
- **Ginseng**
verringert Fatigue; (Cave: interagiert mit P Enzyme, z.B. CYP3A4)
- **Ganoderma Lucidum**
verringert Fatigue; (Cave: inhibiert P Enzyme, z.B. CYP3A4)
- **L-Carnitin**
Prävention der Toxizität, verbessert periphere Neuropathie
verringert Fatigue
- **Curcumin**
vermindert Radiodermatitis
- **Ingwer**
komplementär zu Leitlinien-gerechter Medikation gegen Chemotherapie induzierte Übelkeit/Erbrechen; (Cave: Wechselwirkungen)

Oxford		
LoE	GR	AGO
1a	B	+/-
2a	B	+/-
2b	C	-
2b	C	-
1b	B	--
1b	B	-
1b	B	+/-
1b	C	+/-

General

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- Neuhouser ML, Smith AW, George SM: Use of complementary and alternative medicine and breast cancer survival in the Health, Eating, Activity, and Lifestyle Study. Breast Cancer Res Treat. 2016 Dec;160(3):539-546.

Mistletoe

- Ostermann T, Appelbaum S, Poier D, et al.: A Systematic Review and Meta-Analysis on the Survival of Cancer Patients Treated with a Fermented Viscum album L. Extract (Iscador) – an Update of Findings. Compl Med Res. 2019. In press.
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Thymus

1. Wolf E, Milazzo S, Boehm K, et al. Thymic peptides for treatment of cancer patients. *Cochrane Database of Systematic Reviews* 2012, Issue 2. Art. No.: CD003993. DOI: 10.1002/14651858.CD003993.pub3.

Ginseng, Ganoderma lucidum

1. Leggett S1, Koczwara B, Miller M. The impact of complementary and alternative medicines on cancer symptoms, treatment side effects, quality of life, and survival in women with breast cancer--a systematic review. *Nutr Cancer*. 2015;67(3):373-91.
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L-Carnitine

1. Hershman DL, Unger JM, Crew K et al.: Randomized double-blind placebo-controlled trial of acetyl-L-carnitine for the prevention of taxane-induced neuropathy in women undergoing adjuvant breast cancer therapy. *J Clin Oncol*. 2013 Jul 10;31(20):2627-33
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Curcumin

1. Ryan, J. L., C. E. Heckler, M. Ling, et al (2013). "Curcumin for radiation dermatitis: a randomized, double-blind, placebo-controlled clinical trial of thirty breast cancer patients." *Radiat Res* 180(1): 34-43.
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Ingwer

1. Thamlikitkul L, Srimuninnimit V, Akewanlop C, et al. Efficacy of ginger for prophylaxis of chemotherapy-induced nausea and

vomiting in breast cancer patients receiving adriamycin-cyclophosphamide regimen: a randomized, double-blind, placebo-controlled, crossover study. Support Care Cancer. 2017 Feb;25(2):459-464. doi: 10.1007/s00520-016-3423-8. Epub 2016 Oct 6.

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Komplementäre Therapien

Behandlungsphase – Einfluss auf Toxizität II

	Oxford		
	LoE	GR	AGO
▪ Antioxidanzien (Suppl.)			
▪ verschied. antioxidative Extrakte zur Minderung anthracyclinbedingter Cardiotoxizität	1b	B	-
	2b	B	+/-
▪ Hochdosiert Vitamin C	1b	C	-
▪ Vitamin E	2b	D	-
▪ Selen (zur Linderung von Nebenwirkungen)	1b	B	-
▪ Co-Enzym Q 10 (Fatigue, Lebensqualität)	1b	B	-
▪ Proteolytische Enzyme (gegen Chemotherapie-induzierte Toxizität)	3b	B	-
▪ Chinesische Medizin (Besserung der Wundheilung)	1b	B	-*inf
▪ Sauerstoff- und Ozon-Therapie	5	D	--
▪ Kurzzeitfasten (QoL, Fatigue)	3b	C	+/-*

*inf: Infusion in Deutschland nicht geprüfter Substanzen

* Studienteilnahme empfohlen

General

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Antioxidant supplements

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Vitamin C

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Selen

1. Dennert G, Horneber M. Selenium for alleviating the side effects of chemotherapy, radiotherapy and surgery in cancer patients. Cochrane Database of Systematic Reviews 2010, Issue 11. Art. No.: CD005037. DOI: 10.1002/14651858.CD005037.pub2.
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Coenzym Q10

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Bromelain

1. Hidaka M, Nagata M, Kawano Y, et al.: Inhibitory effects of fruit juices on cytochrome P450 2C9 activity in vitro. *Biosci Biotechnol Biochem.* Feb 2008;72(2):406-411.

Chinese herbal medicine and wound healing

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Kurzzeit-Fasten

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	Oxford		
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<ul style="list-style-type: none"> ▪ Chinesische Kräutermedizin (zur Behandlung chemo-therapiebedingter Nebenwirkungen) 	1b	B	-
<ul style="list-style-type: none"> ▪ Homöopathische Medizin (gegen therapiebedingte Nebenwirkungen) <ul style="list-style-type: none"> → Topische Kalendula (≥ 20% Kalendulaanteil) zur Prophylaxe einer akuten Dermatitis unter Strahlentherapie → Traumeel S® Mundspülung bei chemotherapieinduzierter Stomatitis 	1b	B	+/-
<ul style="list-style-type: none"> ▪ Topische Anwendung Silymarin (Silybin, Mariendisteleextrakt) (akute Hautreaktion unter Strahlentherapie) 	3a	B	+/-
<ul style="list-style-type: none"> ▪ Massage (zur Verbesserung von Fatigue, Schmerzen, Angst, Übelkeit) 	1b	C	+/-
<ul style="list-style-type: none"> ▪ Transkutane elektrische Nervenstimulation (TENS) (bei Karzinomschmerzen) 	2b	D	+/-
<ul style="list-style-type: none"> ▪ Hydrotherapie (bei therapie-assoziiierter Hauttrockenheit, Hautverhärtung, Nagelveränderung) 	3b	C	+/-

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Komplementäre Therapien unter onkologischer Therapie Behandlung von Nebenwirkungen			
	Oxford		
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2019-2020 MAMMA			
Arbeitsgemeinschaft Gynäkologische Onkologie e.V.			
AKUPUNKTUR ZUR VERBESSERUNG VON:			
▪ Chemotherapie-induzierter Übelkeit und Erbrechen			
▪ Elektro-Akupunktur als Ergänzung zu antiemetischer Therapie	1b	B	+
▪ Akupressur als Ergänzung zu Antiemetika	1b	B	+
▪ Schmerzen			
▪ Krebschmerzen	1b	B	+
▪ AI-induzierter Arthralgie	1a	B	+
▪ TENS - transkutane elektrische Nervenstimulation bei Krebschmerzen	2b	D	+/-
▪ Fatigue			
▪ Akupressur	1a	B	+
▪ Angst und Depression	1b	B	+
▪ Kognitiver Dysfunktion	2b	B	+
▪ Menopausensyndrom bei Patientinnen mit Mammakarzinom	5	D	+/-
▪ zur Verbesserung v. Häufigkeit und Schwere d. Hitzewallungen	1b	B	+
▪ Elektroakupunktur zur Verbesserung des Schlafs bei Hitzewallungen	1b	B	+/-
▪ Leukopenie (Moxibustion)	2a	B	+
▪ Chemotherapie-induzierter Polyneuropathie	2b	B	+/-
▪ als Prophylaxe	1b	B	-
▪ als Therapie	2b	B	+/-
▪ Chronischem Lymphödem nach MaCa Therapie	2b	B	+/-

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 Komplementäre Therapien Behandlungsphase – Mind-Body Medizin I			
 © AGO e. V. in der DGGG e.V. sowie in der DKG e.V. Guidelines Breast Version 2020.1D www.ago-online.de FORSCHEN LEHREN HEILEN		Oxford LoE GR AGO	
	MBSR (Mindfulness-Based Stress Reduction – dt. Achtsamkeitsbasierte Stressbewältigung) Programm verbessert Lebensqualität, Bewältigungsstrategien, Achtsamkeit, vermindert Stress, Angst, Depression, Fatigue und Schlafstörung	1a	+
	Körperliches Training/Sport (mind. 3x/Woche moderates Ausdauertraining in Kombination mit kräftigendem Gerätetraining 2 x /Wo.) verbessert Lebensqualität, kardiorespiratorische Fitness, körperliche Leistungsfähigkeit, Schlaf, Schmerz, Depression, Lymphödem und Fatigue	1a	++

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 <p>© AGO e. V. in der DGGG e.V. sowie in der DKG e.V.</p> <p>Guidelines Breast Version 2020.1D</p> <p>www.ago-online.de FORSCHEN LEHREN HEILEN</p>	<h2 style="text-align: center;">Komplementäre Therapien</h2> <h3 style="text-align: center;">Behandlungsphase – Mind-Body Medizin II</h3>		
Entspannungsverfahren			
Reduktion von Angst und Übelkeit, Verbesserung der Lebensqualität, Verminderung psychischer Belastung	2b	C	+/-
Yoga			
Verbesserung von Lebensqualität, Stress, Fatigue, Schlaf, Angst und Depression	1b	A	+
Qigong Verbesserung von Lebensqualität, Fatigue, Stimmung	2a	B	+/-
Tai-Chi			
Verbesserung von Lebensqualität, Muskelkraft, Schlaf	2a	B	+/-
Hypnose (in Kombination mit kognitiver Therapie)			
Verbesserung von Fatigue unter Radiotherapie, Reduktion von Distress	1b	A	+

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Komplementäre Therapien

Rezidivprävention / Verbesserung Gesamtüberleben I

Beeinflussbare Lebensstilfaktoren – Sport – Genussmittel

	Oxford		
	LoE	GR	AGO
<ul style="list-style-type: none"> ■ Körperliches Training/Sport (das Äquivalent zu 3–5 Std. mäßiggradigem „Walking“ verbessert DFS und OS und kardiopulmonale Funktion) 	2a	A	++
<ul style="list-style-type: none"> ■ Nikotinreduktion 	2b	A	+
<ul style="list-style-type: none"> ■ Alkoholkonsum reduzieren (< 6g/die) 	2b	A	+

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Komplementäre Therapien

Rezidivprävention / Verbesserung Gesamtüberleben II

Beeinflussbare Lebensstilfaktoren – Ernährung

		Oxford	
		LoE	GR AGO
■ Anstreben eines normalen BMI		1a	A ++
■ Ernährung mit geringem Fettanteil (Ernährungsberatung empfohlen)		1a	B +
■ Ballaststoffhaltige Lebensmittel (u.a. Saaten, z.B. Leinsamen)		2a	B +
■ Beachten genereller Ernährungsempfehlungen (z.B. von DGE, WCRF) im Sinne einer mediterranen (Vollwert-)Ernährung		2a	B ++
■ Diät-Extreme		2a	B --

Adherence to normal body weight/BMI

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<div>  <div> Komplementäre Therapien Rezidivprävention / Verbesserung Gesamtüberleben III Pflanzliche Therapieansätze – Nahrungsergänzung </div> </div>			
<p>© AGO e. V. in der DGGG e.V. sowie in der DKG e.V.</p> <p>Guidelines Breast Version 2020.1D</p> <p>www.ago-online.de</p> <p>FORSCHEN LEHREN HEILEN</p>	Oxford		
	LoE	GR	AGO
<ul style="list-style-type: none"> Nach Systemtherapie – Vitamine/Antioxidanzien scheinen nicht mit einem erhöhtem Rezidivrisiko assoziiert 	2b	B	
<ul style="list-style-type: none"> Raucher haben ein höheres Bronchial-Ca-Risiko unter Antioxidanzien 	1b	A	
Prävention eines brustkrebsassoz. Rezidivs			
<ul style="list-style-type: none"> Antioxidanzien 	2a	B	+/-
<ul style="list-style-type: none"> Orthomolekulare Substanzen (Selen, Zink ...) 	5	D	-
<ul style="list-style-type: none"> Vitamine (zusätzlich zu ausgewogener Ernährung; Vit. C, E, D) 	2a	B	+/-
<ul style="list-style-type: none"> Karotenoide erscheinen mit schlechterem Ergebnis assoziiert 	2b	B	-
<ul style="list-style-type: none"> Proteolytische Enzyme (Papain, Trypsin, Chymotrypsin) 	3b	B	-
<ul style="list-style-type: none"> Sojaprodukte (Phytoöstrogene) <ul style="list-style-type: none"> Konzentration ≥ 100 mg Isoflavone pro Tag 	2a	B	+/-
<ul style="list-style-type: none"> Traubensilberkerze (Cimicifuga racemosa) 	2a	B	-
<ul style="list-style-type: none"> Mistellektine (Viscum album) 	3b	C	+/-
<ul style="list-style-type: none"> Thymuspeptide (Einfluss auf Überleben) 	1b	C	-
<ul style="list-style-type: none"> Sauerstoff- und Ozon-Therapie 	2a	B	-
<ul style="list-style-type: none"> Antioxidative Supplemente nach Beendigung der Radiotherapie 	5	D	--
<ul style="list-style-type: none"> Laetrile (Aprikosenkernextrakt) 	2b	B	+/-
<ul style="list-style-type: none"> Grüner Tee 	1c	D	--
<ul style="list-style-type: none"> Methadon 	3a	C	+/-
<ul style="list-style-type: none"> Cancer bush (Sutherlandia frutescens), Devil's claw (Harpagophytum procumbens), Rooibos Tee (Aspalathus linearis), Bambara-Erdnuss (Vigna subterranean) 	5	D	--

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