

Skin Toxicities from Immunotherapy

cer

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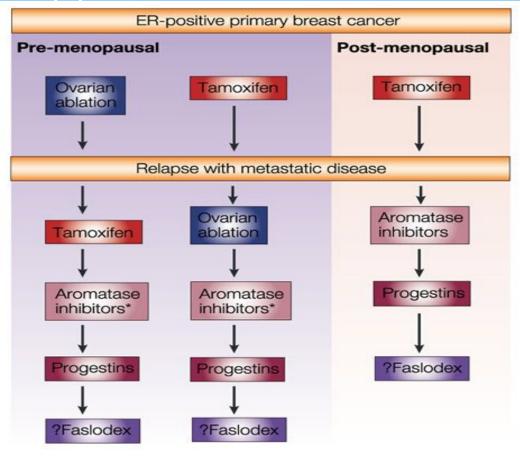
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Endocrine Therapy in Breast Cancer



Estrogen (not Testosterone) is Good for Hair

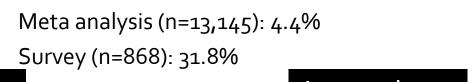
Estradiol + Spironolactone



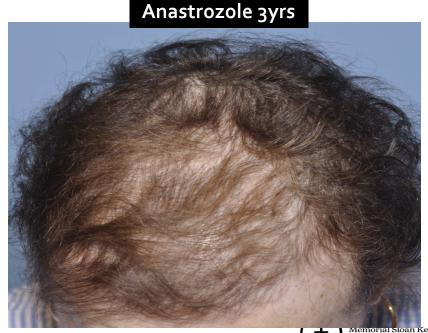


Endocrine Therapy-Induced Alopecia (EIA)

- SERMs, Aromatase inhibitors



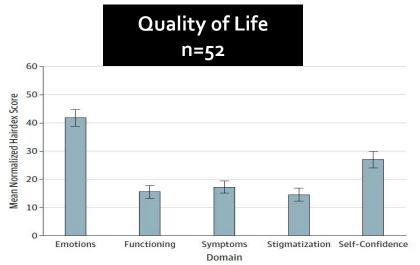




Saggar et al, Oncologist 2013; Park et al, Ann Dermatol 2014; Galliccio et al, Br Cancer Res Treat 2013; Lindner et al, Br J Dermatol 2012

Endocrine Therapy-Induced Alopecia in Patients With Breast Cancer

- Alopecia related to AI/SERM
 - AGA pattern: 75%
 - Grade 2 in 13%



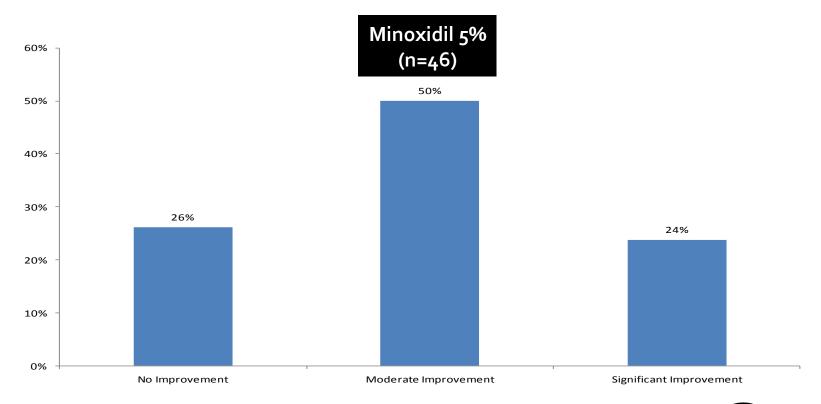
Hair Shaft Diameter (n=41)







Endocrine Therapy-Induced Alopecia in Patients With Breast Cancer



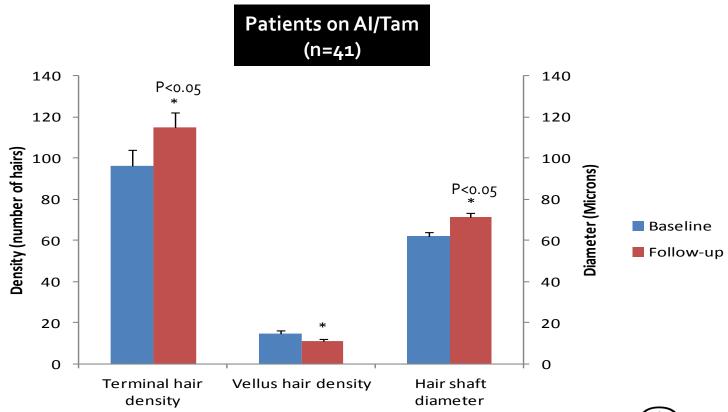


JAMA Dermatology | Original Investigation

Endocrine Therapy-Induced Alopecia in Patients With Breast Cancer



EIA Management-Trichoscopic Outcome





Addition of CDK4/6i to AI: Increased Alopecia

The NEW ENGLAND
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NOVEMBER 17, 2016

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Palbociclib and Letrozole in Advanced Breast Cancer

All-grade Alopecia (%)

<u>Palbo+Al</u> <u>Placebo+Al</u> **32.9 15.8**

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Ribociclib as First-Line Therapy for HR-Positive, Advanced Breast Cancer

All-grade Alopecia (%)

Ribo+Al Placebo+Al 33.2 15.5



Addition of CDK4/6i to AI: Increased QoL Impact

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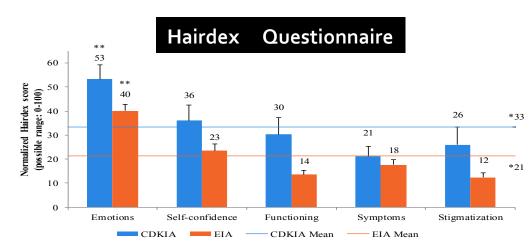
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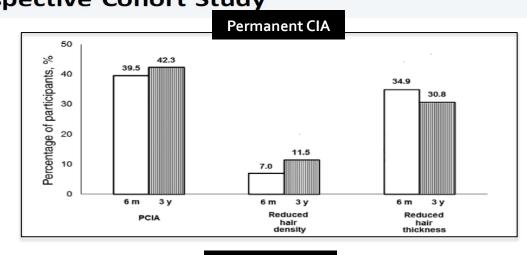






Permanent Chemotherapy-Induced Alopecia in Patients with Breast Cancer: A 3-Year Prospective Cohort Study

Patients n=61	5 5
Characteristics	n (%)
Age, y, mean (SD)	47.1 (9.5)
Marital status (married)	48 (78.7)
Education (less than college)	33 (54.1)
Working status (employed)	17 (27.9)
BMI, kg/m ² , mean (SD)	23.0 (2.9)
Breast surgery type (mastectomy)	25 (41.0)
Disease stage at diagnosis	
Stage I	19 (31.2)
Stage II	21 (34.4)
Stage III	21 (34.4)
Number of cycles	
4 cycles (AC or TC)	16 (26.2)
6 cycles (FAC or TAC)	16 (26.2)
8 cycles (AC+T)	29 (47.5)
Taxane-based chemotherapy	32 (52.5)
Hormone therapy (yes)	43 (70.5)
Tamoxifen	31 (50.8)
Aromatase inhibitor	12 (19.7)
Targeted therapy (trastuzumab)	32 (52.5)
Menopause (yes)	22 (36.1)
Comorbidities ^a (yes)	11 (18.0)



	Impact o	on QoL	_
PCIA	n (%)	Body image score, mean (SD)	
No PCIA	26 (60.5)	70.19 (21.24)	
PCIA	17 (39.5)	51.96 (25.09)	
p values		.014	Sloan Kettering



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Persistent Chemotherapy-Induced Alopecia

Post – Docetaxel (>3 years)

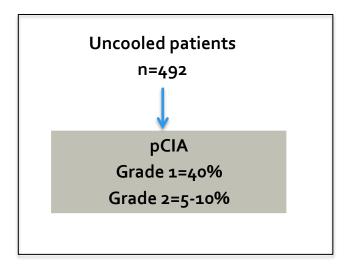


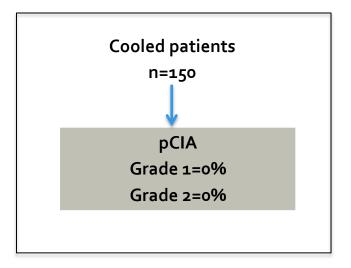




Scalp Cooling Prevents Persistent CIA

Persistent CIA: Results







CHANCE Study:

Chamatharany induced Hair Aging and Nail Sagualag in Broast Cancar Farly Stage

Therapy	/ Init Eval	Eval	Eval	Eval	Eval	Study end
Yr		Yr 1		Yr 2		Yr 3
Stage o-III	Study groups	Cohorts	Treatment Regimen	Individual Drugs		
	CYTOTOXIC CHEMOTHERAPY	(n=100)	ddAC-T	Doxorubicin + Cyclophosphamide + Paclitaxel		
		(n=100)	CMF	Cyclophosphamide + MTX + 5-FU		
		(n=100)	Newer Combination Regimens	e.g. Taxane + Trastuzumab; Taxane+ Carboplatin + Trastuzumab; Taxane + Cyclophosphamide		
	ENDOCRINE THERAPY	IV (n=100)	Tamoxifen	Tamoxifen		
		V (n=100)	Aromatase Inhibitor	Led anastrozole Letrozole Eveme		mestane
	COMPARATOR (menopausal women)	VI (n=100)	NA	No treatment		



Conclusions

Endocrine therapy induced alopecia is frequent

Minoxidil may benefit patients with EIA

- The importance of EIA will increase
 - Combination therapies
 - Increasing time on tamoxifen/Al





Thank you

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