

 Table S1. NSCLC patients treated with osimertinib referred for dAE at MSKCC

Age	Sex	AE (grade)	Intervention	AE outcome	Additional information (histology, lab values)
(y)					
60	F	Xerosis (2)	Ammonium lactate 12%	PR	Culture: MRSA
		Skin infection	Mupirocin 2% ointment		
		(1)	Biotin 2.5 mg/d		
		Brittle nails (1)	Poly-ureaurethane 16% nail		
			solution		
72	F	Pruritus (2)	Doxepin HCl 5% cream,	PR	Specimen submitted and diagnosis:
			diclofenac sodium gel		1. Skin histology analysis, left upper back scapular region,
					biopsy-punch
					2. Dermal melanophages and focal perifollicular
					granulomatous dermatitis; the findings may be due to a
					resolving interface dermatitis and/or folliculitis; deeper
					levels were examined.
68	F	Thin nails (1)	Biotin 2.5 mg/d	PR	
		Xerosis (2)	Triamcinolone acetonide		
			ointment		
55	F	Xerosis (1)	OTC moisturizer	PR	



Age	Sex	AE (grade)	Intervention	AE outcome	Additional information (histology, lab values)
(y)					
70	F	Pruritus (2)	Triamcinolone acetonide	CR	Specimen submitted and diagnosis:
			cream		1. Skin histology analysis, right upper back scapular
					region, biopsy-punch
					2. Perivascular lymphocytic dermatitis
62	F	Xerosis (1)	Ammonium lactate 12%	PR	
67	М	Acneiform	Metronidazole 1% cream	SD	
		rash (1)	Ammonium lactate 12%		
		Xerosis (2)		PR	
			Mupirocin 2% ointment		
		Nasal		SD	
		vestibulitis			
		skin infection			
		(1)			
55	F	Acneiform	Alclometasone 0.05%/dapsone	PR	
		rash (1)	5% gel		
		Xerosis (1)	Ammonium lactate 12%		
41	F	Xerosis (2)	Ammonium lactate 12% and	PR	
			salicylic acid 6%		
59	F	Paronychia (2)	Nail avulsion	CR	Specimens submitted:
		Xerosis (1)			1. Left great toe; partial nail avulsion



Age	Sex	AE (grade)	Intervention	AE outcome	Additional information (histology, lab values)
(y)					
			Ammonium lactate 12%		2. Right great toe; partial nail avulsion – 2 pieces
					Diagnosis:
					1. Nail, left great toe; partial nail avulsion: onychomycosis
					2. Nail, right great toe; partial nail avulsion:
					onychomycosis
					Note: PAS stains were positive in both specimens
75	F	Pruritus (2)	Triamcinolone acetonide	CR	
			cream		
		Xerosis (1)	Ammonium lactate 12%		
		Brittle nails (1)	Biotin 2.5 mg/d		
53	F	Acneiform	Brimonidine tartrate 0.33%	SD	
		rash (1)	gel, metronidazole 0.75%		
			cream		
			Ammonium lactate 12%		
		Xerosis (2)		PR	
73	М	Urticaria (2)	Clobetasol 0.05%, hydroxyzine	CR	
		Acneiform	Alclometasone 0.05%		
		rash (1)			



Age	Sex	AE (grade)	Intervention	AE outcome	Additional information (histology, lab values)
(y)					
64	F	Acneiform	Fluocinolone acetonide oil	PR	Coagulase-negative Staphylococcus resistant
		rash/skin	0.01%, cefadroxil		
		infection (2)			
		Xerosis (2)			
			Salicylic acid 6%, triamcinolone	PR	
		Pruritus (2)	acetonide		
			Pregabalin	PR	
73	F	Paronychia (2)	Partial nail avulsion	PR	Staphylococcus aureus, Proteus mirabilis, Morganella
		Xerosis (2)			morganii
			Ammonium lactate 12%	PR	
48	F	Xerosis (2)	Salicylic acid 6%, ammonium	PR	
			lactate 12%		
74	F	Alopecia (1)	Biotin 2.5 mg/d	SD	
		Pruritus (1)			
		Xerosis (1)	Ammonium lactate 12%	CR	
55	F	Acneiform	Alclometasone 0.05%/dapsone	SD	
		rash (1)	5% gel		
		Hyperpigment	Hydroquinone 4%/salicylic acid	NA	
		ation (1)	6%		



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Age	Sex	AE (grade)	Intervention	AE outcome	Additional information (histology, lab values)
(y)	(y)				
	Xerosis (1) A		Ammonium lactate 12%	SD	

Abbreviations: dAEs, dermatologic adverse events; CR, complete response; F, female; M, male; MRSA, methicillin-resistant *Staphylococcus aureus*; MSKCC, Memorial Sloan Kettering Cancer Center; NA, not available; NSCLC, non-small cell lung cancer; OTC, over-the-counter; PAS, Periodic acid-Schiff; PR, partial response; SD, stable disease; y, year(s).



Table S2. NSCLC patients treated with osimertinib referred for dAEs at NTUH

Age	Sex	Osimertinib	AE (grade)	Intervention	AE outcome	Additional information
(y)		initiation				
41	F	1L – 80 mg/d	Acneiform	Desloratadine and	Improved	
		for	rash (1),	buclizine for pruritus;		
		1 y	pruritus (1),	fluticasone 0.05% cream		
			xerosis (1)	for trunk eczema;		
				desoximetasone 0.25%		
				ointment for limb		
				eczema; tetracycline 1%		
				ointment for fissures		
68	М	2L – 80 mg/d	Acneiform	Levocetirizine for	Pruritus and acneiform	Combine selumetinib 75 mg q12h
		for	rash (1),	pruritus; fluticasone	rash improved;	
		10 mo	pruritus (1),	0.05% cream for	paronychia persisted	
			xerosis (1)	eczema; tetracycline 1%		
			paronychia	ointment for fissures		
			(1)	and paronychia; urea		
				10% cream for		
				generalized xerosis		
69	M	>3L - 80	Acneiform	Tetracycline 1%	Acneiform rash and	
		mg/d for	rash (1),	ointment for	xerosis improved 3 mo	



Age	Sex	Osimertinib	AE (grade)	Intervention	AE outcome	Additional information
(y)		initiation				
		2 mo	xerosis (1),	paronychia; silver	later; paronychia	
			paronychia	nitrate application once	improved 9 mo later	
			(31)	weekly		
53	М	3L – 40 mg/d	Paronychia	Doxymycin EC 100	Pruritus and acneiform	
		for 2 mo	(31);	mg/cap for 2 wk,	rash improved;	
			pruritus (1),	tetracycline 1%	paronychia grade 1	
			xerosis (1)	ointment for	persisted for 7 mo	
				paronychia; silver		
				nitrate application once		
				weekly; hydrocortisone		
				acetate 1% ointment		
				and tetracycline 1%		
				ointment for fissures;		
				desoximetasone 0.25%		
				ointment bid for leg and		
				trunk eczema		
65	F	2L – 80 mg/d	None			
		for 9 mo				
47	F	1L – 80 mg/d	Acneiform	Fluticasone for	Acneiform rash	
		for 2 mo	rash (1),	acneiform rash and	improved; paronychia	



Age	Sex	Osimertinib	AE (grade)	Intervention	AE outcome	Additional information
(y)		initiation				
			xerosis (1),	tetracycline 1%	persisted for 32 mo	
			Paronychia	ointment for fissures		
			(32)	and paronychia; silver		
				nitrate application once		
				weekly; hydrocortisone		
				acetate 1% ointment for		
				xerosis; fusidic acid		
				cream for folliculitis		
35	М	3L – 80 mg/d	Paronychia	Silver nitrate application	Paronychia improved 1	Combine selumetinib 75 mg q12h
		for 3 mo	(2)	every wk	mo later	
57	F	3L – 80 mg/d	Acneiform	Levocetirizine and	Acneiform rash	
		for 1 mo	rash (1),	fluticasone for	improved; xerosis and	
			xerosis (1),	acneiform rash and	paronychia persisted for	
			paronychia	tetracycline 1%	4 mo	
			(31)	ointment for fissures		
				and paronychia; silver		
				nitrate application once		
				weekly; hydrocortisone		
				acetate 1% ointment for		
				acneiform rash; urea		



Age	Sex	Osimertinib	AE (grade)	Intervention	AE outcome	Additional information
(y)		initiation				
				10% cream for		
				generalized xerosis		
87	M	3L – 80 mg/d	Xerosis (1),	Tetracycline 1%	Xerosis and pruritus	
		for 9 mo	pruritus (3)	ointment for fissures;	persisted for 9 mo	
				hydrocortisone acetate		
				1% ointment for xerotic		
				eczema; fexofenadine		
				120 mg/d and doxepin		
				25 mg plus buclizine 50		
				mg every night for		
				pruritus; aprepitant 125		
				mg loading and then 80		
				mg every other day for		
				refractory pruritus		
47	F	2L – 80 mg/d	None			
		for 7 mo				
52	F	2L – 80 mg/d	None			
		for 15 mo				
72	F	2L – 80 mg/d	None			



Age	Sex	Osimertinib	AE (grade)	Intervention	AE outcome	Additional information
(y)		initiation				
		for 10 mo				
79	F	2L – 80 mg/d	None			
		for 6 mo				
66	F	2L – 80 mg/d	None			
		for 6 mo				
53	F	2L – 80 mg/d	Paronychia	Tetracycline 1%	Paronychia improved 1	
		for 2 mo	(1)	ointment for	mo later	
				paronychia; silver		
				nitrate application once		
				weekly		
60	F	1L - 160	Pruritus (1),	Hydrocortisone acetate	Improved 1 mo later	
		mg/d for 2 y	xerosis (1)	1% ointment for xerosis;		
		and 4 mo		chlorpheniramine		
				maleate/lidocaine		
				ointment for pruritus		
57	F	3L – 80 mg/d	None			
		for 2 mo				
52	F	>3L <b>-</b> 80	Pruritus (1)	Levocetirizine for	Improved 1 mo later	
		mg/d for		pruritus		
		3 mo				



Age	Sex	Osimertinib	AE (grade)	Intervention	AE outcome	Additional information
(y)		initiation				
48	F	2L – 80 mg/d	None			
		for 2 mo				
76	F	3L – 80 mg/d	Paronychia	Tetracycline 1%	Paronychia improved 2	Combine selumetinib 50 mg q12h
		for 7 mo	(1)	ointment for paronychia	mo later	
48	F	>3L – 80	Paronychia	Tetracycline 1%	Paronychia improved 1	Combine selumetinib 75 mg q12h
		mg/d for	(1)	ointment for paronychia	mo later	
		5 mo				
79	F	2L – 80 mg/d	Acneiform	Desoximetasone 0.25%	Acneiform rash,	
		for 2 mo	rash (2),	ointment bid for limb	pruritus, xerosis	
			xerosis (1),	eczema;	improved 6 mo later	
			pruritus (1)	chlorpheniramine		
				maleate/lidocaine		
				ointment for pruritus;		
				urea 10% cream for		
				xerosis; tetracycline 1%		
				ointment for fissures		
				and wounds; fusidic acid		
				cream for folliculitis		
57	F	2L – 80 mg/d	Acneiform	Tetracycline 1%	Acneiform rash	Combine selumetinib 75 mg q12h
		for 2 mo	rash (2),	ointment for	improved, pruritus,	



Age	Sex	Osimertinib	AE (grade)	Intervention	AE outcome	Additional information
(y)		initiation				
			xerosis (2),	paronychia; sliver	xerosis, and paronychia	
			pruritus (2),	nitrate treatment	persisted for 12 mo	
			paronychia	monthly; hydrocortisone		
			(32)	acetate 1% ointment for		
				xerotic eczema;		
				clobetasol propionate		
				ointment for eczema on		
				the legs; oral cephalexin		
				for severe paronychia on		
				the right big toe		
75	F	2L – 80 mg/d	None			
		for 7 mo				
61	F	>3L - 80	None			
		mg/d for				
		22 mo				
59	F	2L – 80 mg/d	None			
		for 2 mo				
81	F	3L – 80 mg/d	Acneiform	Oral cephalexin for right	Acneiform rash	
		for 1 mo	rash (3);	leg cellulitis;	improved after	
			cellulitis	chloramphenicol	intravenous cephalexin	



Age	Sex	Osimertinib	AE (grade)	Intervention	AE outcome	Additional information
(y)		initiation				
				ointment for wounds	and D/C osimertinib	
				and pustules		
57	М	2L – 80 mg/d	Xerosis (1),	Tetracycline 1%	Xerosis and paronychia	Combine selumetinib 75 mg q12h
		for 2 mo	paronychia	ointment for	persisted for 4 mo	
			(1)	paronychia; moisturizer		
				for xerosis		
65	F	3L – 80 mg/d	None			
		for 9 mo				
61	М	2L – 80 mg/d	None			
		for 2 mo				
60	F	3L – 80 mg/d	Acneiform	Desoximetasone 0.25%	Acneiform rash, xerosis	
		for 2 mo	rash (1),	ointment for eczema on	and pruritus improved 1	
			xerosis (1),	the four limbs;	mo later	
			pruritus (1)	moisturizer use		
78	М	3L – 40 mg/d	None			
		for 26 mo				
		and then				
		change to 80				
		mg/d for 14				
		mo				



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Age	Sex	Osimertinib	AE (grade)	Intervention	AE outcome	Additional information
(y)		initiation				
76	F	2L – 80	None			
		mg/day for 5				
		mo				
77	F	3L – 80 mg/d	Paronychia	Chloramphenicol	Acneiform rash	
		for 1 mo	(1), pruritus	ointment for wounds;	improved 2 mo later;	
			(2), acneiform	buclizine for pruritus;	pruritus, xerosis, and	
			rash (1),	desoximetasone 0.25%	paronychia persisted for	
			xerosis (1)	ointment for acneiform	4 mo	
				rash; urea 10% cream		
				for xerosis		

1L, first line; 2L, second line; 3L, third line; bid, twice daily; D/C, discontinue; EC, enteric coated; F, female; M, male; mo, month(s); NSCLC, non-small cell lung cancer; NTUH, National Taiwan University Hospital; wk, week(s); y, year(s).