

BACKGROUND



Psoriatic arthritis is a complex inflammatory disease characterized by clinical manifestations in a number of different domains.¹ Up to 30% of patients with psoriasis will develop psoriatic arthritis, which can have a major impact on patient quality of life.² Psoriatic arthritis can be a challenging condition for rheumatologists to manage.

METHODS

A CME-certified virtual patient simulation (VPS) of 2 patient cases in which rheumatologists chose diagnostic and treatment options from an extensive database and received evidence-based feedback. Clinical decisions were compared pre- and post-clinical guidance (CG) using McNemar's tests to determine statistical significance ($P < .05$ was considered significant).

OBJECTIVES

We assessed whether an online VPS activity could improve the performance of rheumatologists in ordering appropriate tests, tailoring treatment options, and selecting an evidence-based treatment for patients with PsA.



- An online VPS activity with 2 patient cases.
- The activity launched on 28 February 2019 with data collection through 16 May 2019.

RESULTS

Pre/post comparison of relative increase in appropriate decisions made by each participant (orange bullseye represents 100% appropriate decisions)



PATIENT CASE 1 (n = 48 RHEUMATOLOGISTS)



AMELIA P.
CASE SUMMARY

45-year-old woman diagnosed with psoriasis 5 years ago. Current treatment with methotrexate 15 mg and folic acid once weekly, plus ibuprofen. Experiencing nausea and increasing skin lesions. Recently showing signs and symptoms of psoriatic arthritis.

Age: 45 years
Gender: Female
Weight: 85.0 kg
Height: 162.6 cm
BMI: 32.71
Allergies: None

Selecting an evidence-based treatment to manage a patient with psoriasis and psoriatic arthritis

Decision Points	Responses/Improvement	P-Value
Start: Treatment for Preferred Drug Group - Adalimumab	17% 23% +138% ↑	< .001

■ % Correct Pre-CG ■ % Correct Increase Post-CG

Ordering appropriate tests to evaluate patients with signs and symptoms of psoriatic arthritis

Decision Points	Responses/Improvement	P-Value
Order: Chemistry Panel (Molar)	73% 8% +11% ↑	= .04
Order: Full Blood Count (FBC)	85% 8% +10% ↑	= .04
Order: Interferon Gamma Release Assay-TB	56% 13% +22% ↑	= .01
Order: Live Function Tests (LFTs)	81% 10% +13% ↑	= .02
Order: Rheumatology Consult	67% 13% +19% ↑	= .01
Order: Viral Hepatitis Panel	44% 23% +52% ↑	< .001

Tailoring treatment options based on individual patient characteristics and available evidence

Decision Points	Responses/Improvement	P-Value
Discontinue: Folic Acid	31% 44% +140% ↑	< .001
Discontinue: Methotrexate	58% 27% +46% ↑	< .001
Order: Follow-Up Appointment	56% 15% +26% ↑	= .006
Order: Lifestyle Change: Stress Reduction	63% 13% +20% ↑	= .01
Order: Patient Education	60% 15% +24% ↑	= .006
Order: Preventative Vaccines	50% 19% +38% ↑	= .002

PATIENT CASE 2 (n = 116 RHEUMATOLOGISTS)



FINLEY R.
CASE SUMMARY

55-year-old man who has had psoriasis for 9 years. Developed joint symptoms 1 year ago. Diagnosed with psoriatic arthritis and treated with methotrexate and folic acid. Elevated liver enzymes noted after 9 months; treatment switched to adalimumab. Skin lesions much improved but ongoing issues with pain and stiffness in hands. Current medications are citalopram, adalimumab, simvastatin, and triamcinolone for skin flares.

Age: 55 years Gender: Male
Weight: 100.0 kg Height: 175 cm
BMI: 32.7 Allergies: None

Tailoring treatment options based on individual patient characteristics and available evidence

Decision Points	Responses/Improvement	P-Value
Discontinue: Biologic DMARDs - Adalimumab	58% 28% +67% ↑	< .001
Order: Follow-Up Appointment	49% 16% +32% ↑	< .001
Order: Occupational Therapy	45% 12% +27% ↑	< .001
Order: Patient Education	51% 11% +22% ↑	< .001
Order: Physical Therapy	47% 15% +31% ↑	< .001
Order: Preventative Vaccines	40% 14% +35% ↑	< .001
Order: Psychosocial Counseling	42% 13% +31% ↑	< .001

Ordering appropriate tests to evaluate patients with signs and symptoms of psoriatic arthritis

Decision Points	Responses/Improvement	P-Value
Order: Beck Depression Inventory (BDI), Standard	37% 19% +51% ↑	< .001
Order: BSA times PGA	54% 11% +21% ↑	< .001
Order: C-reactive Protein (CRP)	81% 7% +9% ↑	= .004
Order: Chemistry Panel (Molar)	65% 9% +15% ↑	< .001
Order: Erythrocyte Sedimentation Rate (ESR)	73% 7% +9% ↑	= .004
Order: Full Blood Count (FBC)	72% 12% +17% ↑	< .001
Order: GQOL (Global Quality of Life)	55% 7% +13% ↑	= .004
Order: Leeds Enthesitis Index	54% 14% +25% ↑	< .001
Order: Liver Function Tests (LFTs)	59% 19% +32% ↑	< .001
Order: Physician Global Assessment (PGA)	58% 12% +21% ↑	< .001
Order: RAPID 3 Assessment	30% 19% +63% ↑	< .001
Order: Total Body Surface Area (TBSA)	16% 22% +137% ↑	< .001
Order: X-Ray (Hands/Feet)	66% 18% +27% ↑	< .001

Selecting an evidence-based treatment to manage a patient with psoriasis and psoriatic arthritis

Decision Points	Responses/Improvement	P-Value
Ixekizumab	3% 4% +167% ↑	= .01
Secukinumab	22% 33% +152% ↑	< .001

■ % Correct Pre-CG ■ % Correct Increase Post-CG

CONCLUSION

These results demonstrate the success of immersive, online VPS education that engages physicians in a practical learning experience in improving their performance in managing patients with PsA.

DISCLOSURES

Elaine Bell, PhD, has disclosed no relevant financial relationships.

Alice Bendix Gottlieb, MD, PhD, has disclosed the following relevant financial relationships:

Served as an advisor or consultant for: Avotres Therapeutics; Beiersdorf; Boehringer Ingelheim; Bristol-Myers Squibb Co.; Incyte; Janssen; LEO Pharma; Eli Lilly; Novartis; Sun Pharmaceutical Industries, Inc.; UCB; and Xbiotech (only stock options which she has not used).

Served as a speaker or a member of a speakers bureau for: AbbVie Inc.; Allergan, Inc.; Bristol-Myers Squibb Company; Celgene Corporation; Dermira Inc.; Dr. Reddy's Laboratories Ltd.; Eli Lilly and Company; Incyte Corporation; Janssen Pharmaceuticals; LEO Pharma Inc.; Novartis Pharmaceuticals Corporation; Sun Pharmaceutical Industries, Ltd.; UCB Pharma, Inc.; Valeant Pharmaceuticals International; Xbiotech USA, Inc.

Received grants for clinical research from: Boehringer Ingelheim, Incyte, Janssen, Novartis, UCB, Xbiotech and Sun Pharma.

Philip J. Mease, MD, has disclosed the following relevant financial relationships:

Served as an advisor or consultant for: AbbVie Inc.; Amgen Inc.; Bristol-Myers Squibb Company; Celgene Corporation; Eli Lilly and Company; Galapagos NV; Janssen Pharmaceuticals; Novartis Pharmaceuticals Corporation; Pfizer Inc.; Sun Pharmaceutical Industries, Ltd.; UCB Pharma, Inc.

Served as a speaker or a member of a speakers bureau for: AbbVie Inc.; Amgen Inc.; Bristol-Myers Squibb Company; Celgene Corporation; Genentech, Inc.; Janssen Pharmaceuticals; Novartis Pharmaceuticals Corporation; Pfizer Inc.; UCB Pharma, Inc.

Received grants for clinical research from: AbbVie Inc.; Amgen Inc.; Bristol-Myers Squibb Company; Celgene Corporation; Eli Lilly and Company; Janssen Pharmaceuticals; Novartis Pharmaceuticals Corporation; Pfizer Inc.; Sun Pharmaceutical Industries, Ltd.; UCB Pharma, Inc.

Gwen Littman, MD, has disclosed no relevant financial relationships.

Mark Via has disclosed no relevant financial relationships.

SUPPORT

Supported by an independent educational sponsorship from Lilly.

For more information, please contact Elaine Bell, PhD Director, Clinical Strategy, Medscape, at ebell@webmd.net

REFERENCES

1. Ritchlin CT, Colbert RA, Gladman DD. Psoriatic arthritis. *N Engl J Med*. 2017;376:957-970
2. Gladman DD. Psoriatic arthritis. *Dermatol Ther*. 2009;22:40-55.



Scan here to view this poster online.