



US008182814B2

(12) **United States Patent**
Baca et al.

(10) **Patent No.:** **US 8,182,814 B2**
(45) **Date of Patent:** **May 22, 2012**

(54) **METHODS OF TREATING INFLAMMATORY AIRWAY CONDITIONS BY INHIBITION OF IL-11 ACTIVITY**

(58) **Field of Classification Search** None
See application file for complete search history.

(75) Inventors: **Manuel Baca**, Gaithersburg, MD (US);
Andrew Donald Nash, Kew (AU); **Jack A. Elias**, Woodbridge, CT (US)

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,679,339	A *	10/1997	Keith et al.	424/85.2
6,540,993	B1 *	4/2003	Warne et al.	424/85.2
7,252,820	B2 *	8/2007	Boodhoo et al.	424/94.67
7,393,532	B1 *	7/2008	de Sauvage et al.	424/144.1
7,612,181	B2 *	11/2009	Wu et al.	530/387.3

(73) Assignees: **CSL Limited**, Parkville, Victoria (AU);
Yale University, New Haven, CT (US)

OTHER PUBLICATIONS

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

Molet et al., *J. Allergy Clin. Immunology* 2001, 108:430-438.*
Wang, J. et al. IL-11 selectively inhibits aeroallergen-induced pulmonary eosinophilia and Th2 cytokine production. *J Immunol* 165, 2222-31 (2000).*
Minshall et al., *J. Allergy Clin. Immunology* 2000, 105:232-238.*
Kyung Sun Lee et al., "Cysteinyl leukotriene upregulates IL-11 expression in allergic airway disease of mice", *J. Allergy Clin. Immunol.*, 119(1):141-149 (Jan. 1997; published online on Oct. 27, 2006).

(21) Appl. No.: **12/256,883**

* cited by examiner

(22) Filed: **Oct. 23, 2008**

Primary Examiner — Lorraine Spector

(65) **Prior Publication Data**

US 2009/0202533 A1 Aug. 13, 2009

(74) *Attorney, Agent, or Firm* — Scully, Scott, Murphy & Presser, P.C.

Related U.S. Application Data

(60) Provisional application No. 61/000,588, filed on Oct. 26, 2007.

(57) **ABSTRACT**

(51) **Int. Cl.**

A61K 38/20	(2006.01)
C07K 14/715	(2006.01)
C07K 14/54	(2006.01)
C07K 16/28	(2006.01)
C07K 16/24	(2006.01)

The present invention provides a method for the treatment or prophylaxis of T-helper type 2 (Th2)-mediated disorders using antagonists of IL-11.

(52) **U.S. Cl.** **424/143.1**; 424/133.1; 424/139.1;
424/141.1; 424/145.1; 530/351; 530/387.3;
530/388.22; 530/388.23

16 Claims, 4 Drawing Sheets

24 HOURS

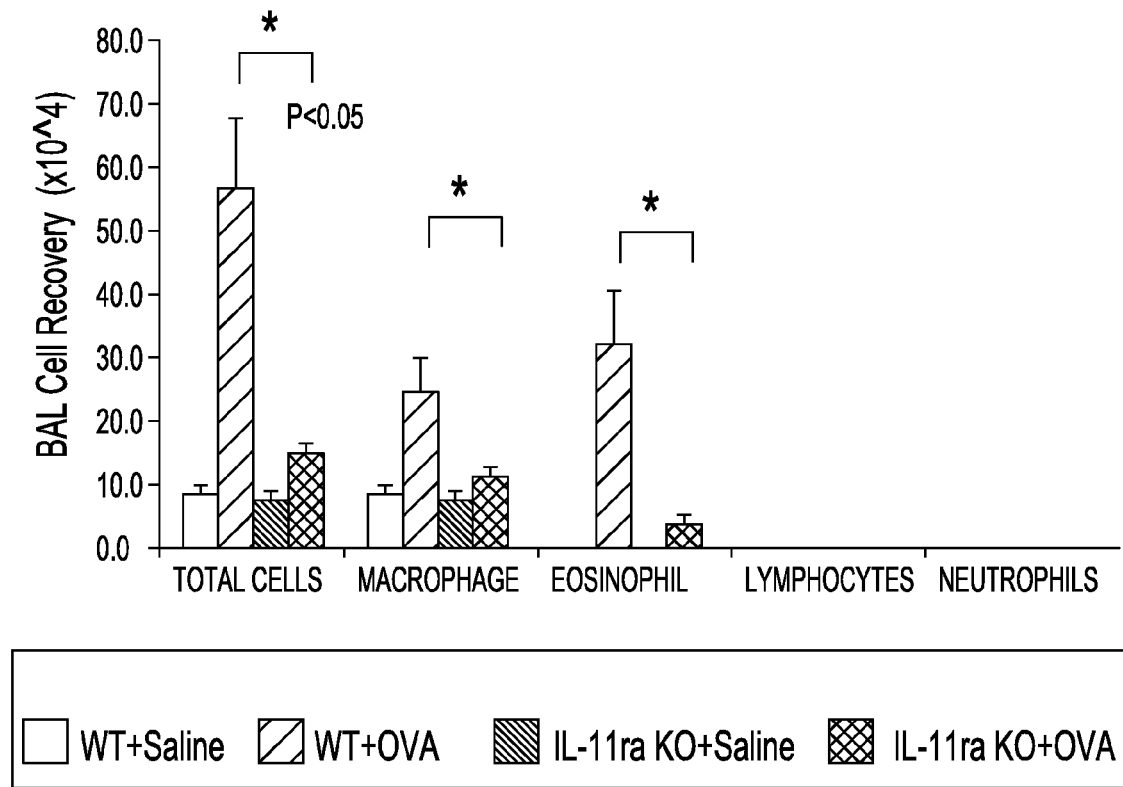


FIG. 1

48 HOURS

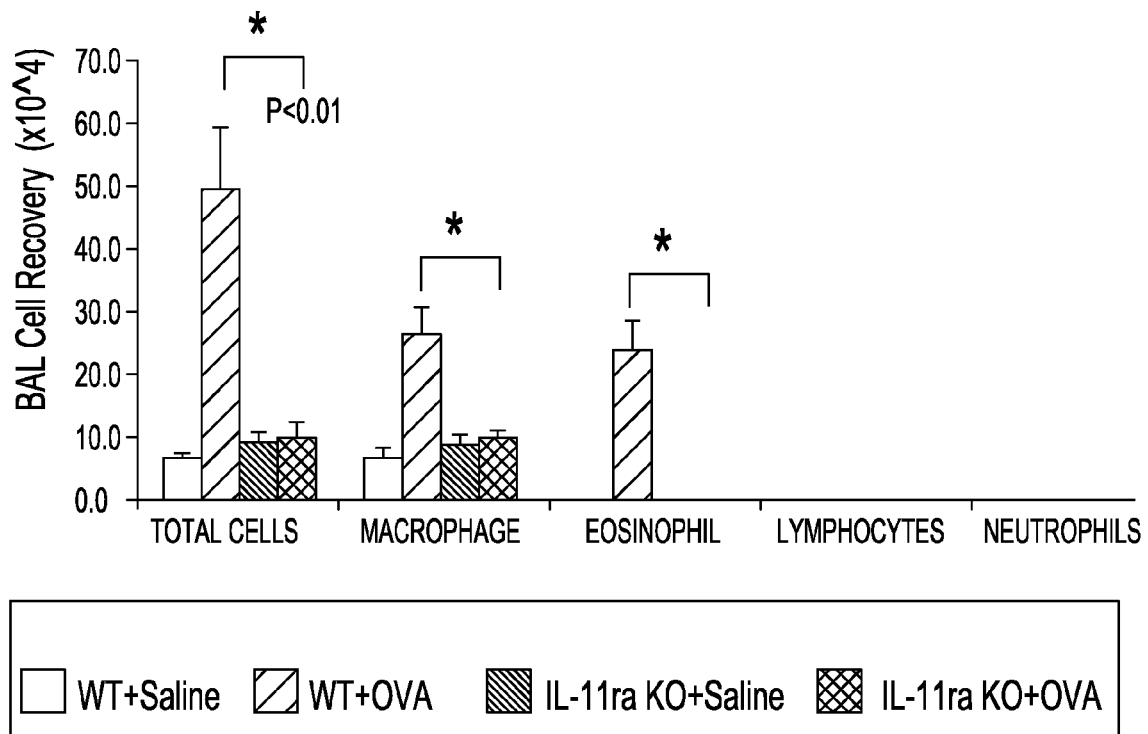


FIG. 2

72 HOURS

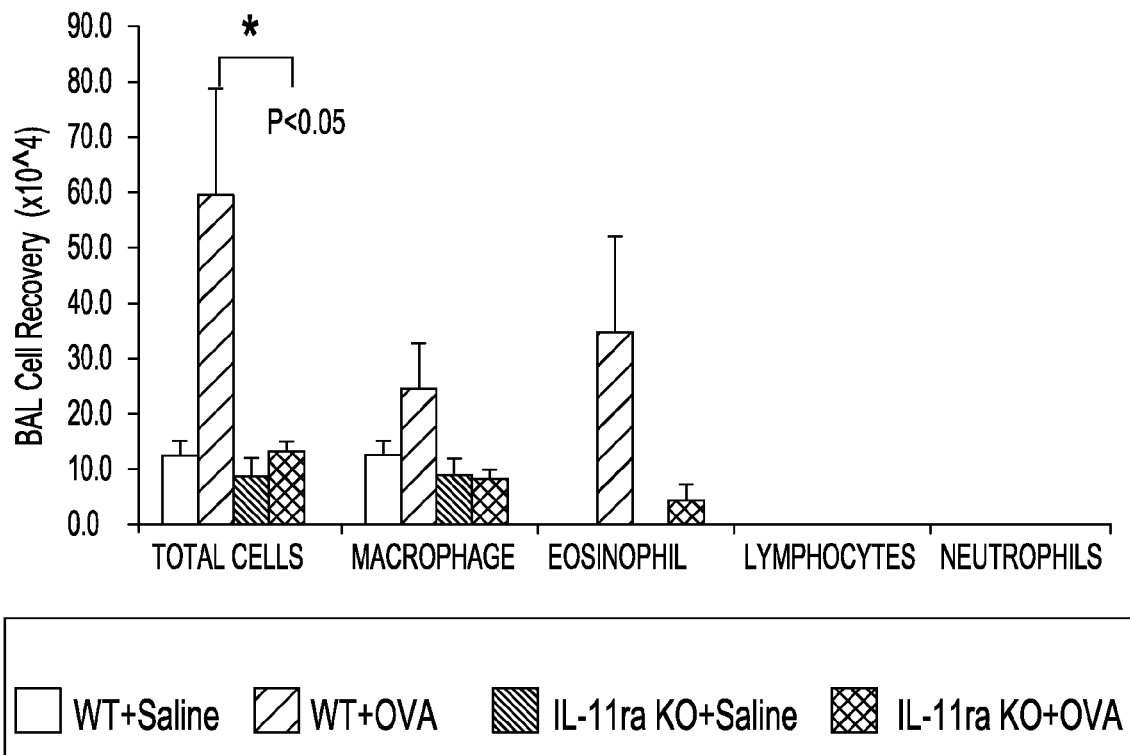


FIG. 3

24 Hours

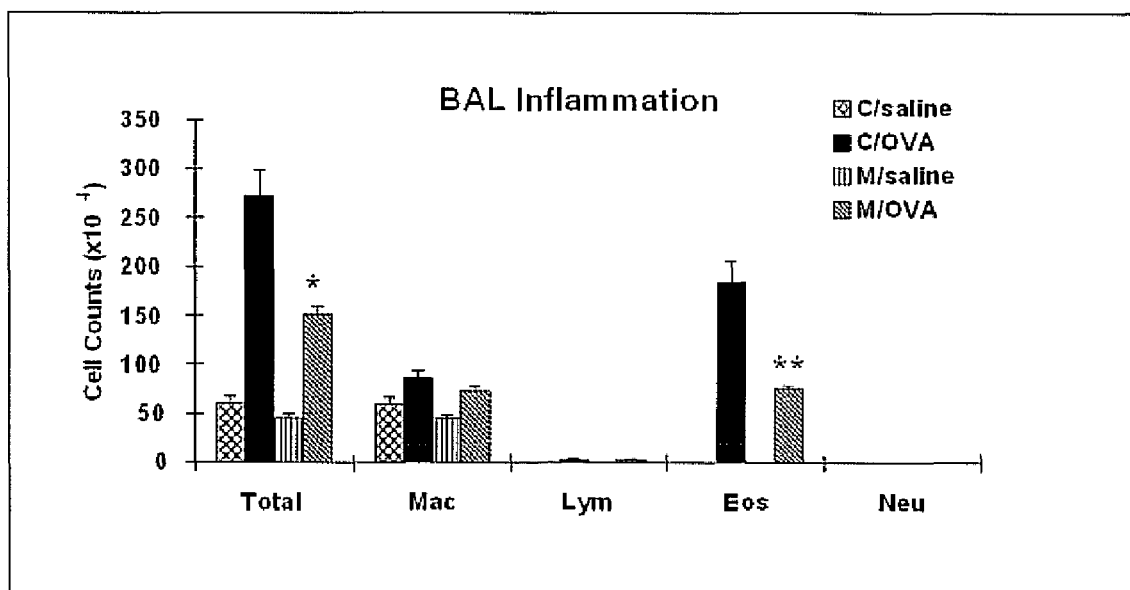


Figure 4

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.