#### UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

#### FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): December 11, 2013

#### **QUESTCOR PHARMACEUTICALS, INC.**

(Exact Name of Registrant as Specified in Charter)

California (State or Other Jurisdiction of Incorporation) 001-14758 (Commission File Number) 33-0476164 (I.R.S. Employer Identification No.)

1300 Kellogg Drive, Suite D, Anaheim, California (Address of Principal Executive Offices) 92807 (Zip Code)

Registrant's telephone number, including area code: (714) 786-4200

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Dere-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

#### Item 7.01. Regulation FD Disclosure.

Commencing on December 11, 2013, Questcor Pharmaceuticals, Inc. will utilize an updated presentation for investor relations purposes.

In accordance with General Instruction B.2. of Form 8-K, the information in Item 7.01 of this Current Report on Form 8-K, including Exhibit 99.1, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

#### Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.Description99.1Questcor Pharmaceuticals, Inc. Investor Presentation.

#### SIGNATURES

Pursuant to the requirements of the Exchange Act, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: December 11, 2013

#### QUESTCOR PHARMACEUTICALS, INC.

By: /s/ Michael H. Mulroy Michael H. Mulroy Executive Vice President, Chief Financial Officer, and General Counsel Exhibit No.Description99.1Questcor Pharmaceuticals, Inc. Investor Presentation.



# NASDAQ: QCOR

OPPENHEIMER Healthcare Conference

December 11, 2013



### Safe Harbor Statement

Note: Except for the historical information contained herein, this press release contains forward-looking statements that have been made pursuant to the Private Securities Litigation Reform Act of 1995. These statements relate to future events or our future financial performance. These statements are only predictions. Actual events or results may differ materially. Factors that could cause or contribute to such differences include, but are not limited to, the following: Our reliance on Acthar for substantially all of our net sales and profits; Reductions in vials used per prescription resulting from changes in treatment regimens by physicians or patient compliance with physician recommendations; Our ability to receive high reimbursement levels from third party payers; The complex nature of our manufacturing process and the potential for supply disruptions or other business disruptions; The lack of patent protection for Acthar and the possible FDA approval and market introduction of competitive products; Our ability to continue to generate revenue from sales of Acthar to treat on-label indications associated with NS, MS, IS or rheumatology-related conditions, and our ability to develop other therapeutic uses for Acthar; Research and development risks, including risks associated with Questcor's work in the area of NS and Lupus, our efforts to develop and obtain FDA approval of Synacthen, our reliance on thirdparties to conduct research and development and the ability of research and development to generate successful results; The results of any pending or future litigation, investigations or claims, including government investigations and private securities litigation; Our ability to comply with federal and state regulations, including regulations relating to pharmaceutical sales and marketing practices; Regulatory changes or other policy actions by governmental authorities and other third parties in connection with U.S. health care reform or efforts to reduce federal and state government deficits; An increase in the proportion of our Acthar unit sales comprised of Medicaid-eligible patients and government entities; Our ability to estimate reserves required for Acthar used by government entities and Medicaid-eligible patients and the impact that unforeseen invoicing of historical Medicaid prescriptions may have upon our results; Our ability to effectively manage our growth, including the expansion of our sales forces, planned international expansion, and our reliance on key personnel; Our ability to integrate the BioVectra business with our business and to manage, and grow, a contract manufacturing business; Our ability to comply with foreign regulations related to the operating of BioVectra's business and the international sales of Synacthen; The impact to our business caused by economic conditions; Our ability to protect our proprietary rights; The risk of product liability lawsuits; Our ability to successfully enter into, and operate in, international markets; The risk of unfavorable changes in currency exchange rates; Unforeseen business interruptions and security breaches; Volatility in Questcor's Acthar shipments, estimated channel inventory, and end-user demand, as well as volatility in our stock price; Our ability and willingness to continue to pay our quarterly dividend or make future increases in our quarterly dividend; and Other risks discussed in Questcor's annual report on Form 10-K for the year ended December 31, 2012 as filed with the Securities and Exchange Commission, or SEC, on February 27, 2013, and other documents filed with the SEC.

The risk factors and other information contained in these documents should be considered in evaluating Questcor's prospects and future financial performance.



A biopharmaceutical company focused on the treatment of patients with serious, difficult-to-treat autoimmune and inflammatory disorders



# **Investment Highlights**

Flagship product Acthar has a unique therapeutic role and sustainable competitive advantages

Acthar is approved for 19 indications, many in markets with sizable unmet need

Market penetration remains modest; sales have increased rapidly

Increasing investment in R&D to grow the body of evidence and diversify

Profitable, strong cash flow and balance sheet; returned cash to shareholders thru buybacks and dividends

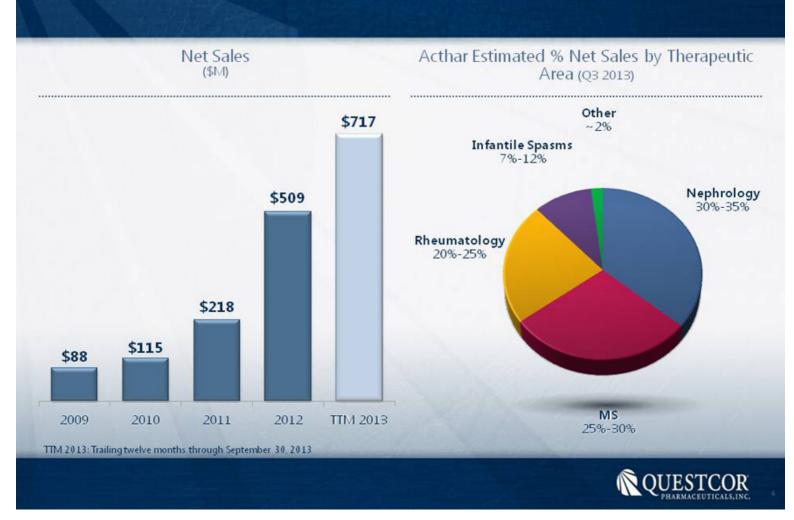


# 3-Year Net Sales

### Quarterly Net Sales (\$M)

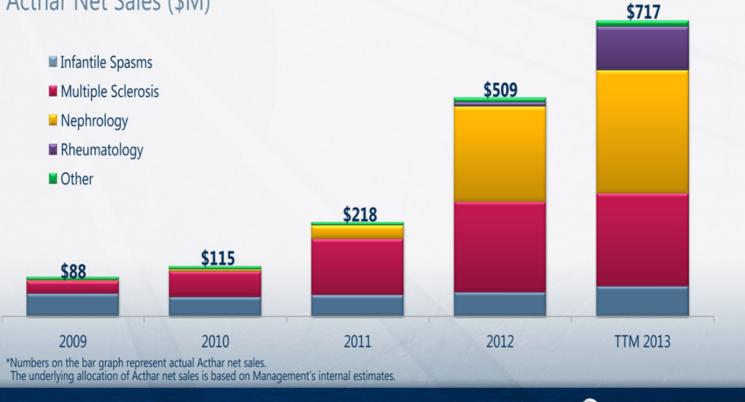


### **Acthar Business Diversification Continues**



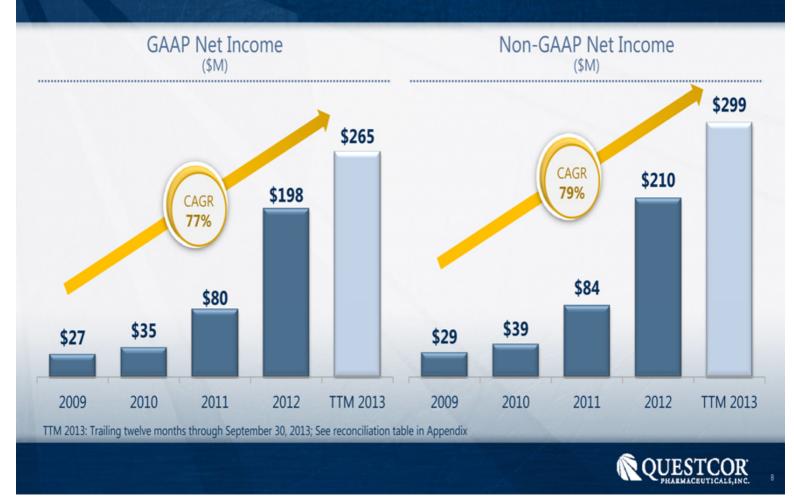
## Expanding Acthar Sales Across Therapeutic Areas

### Acthar Net Sales (\$M)





# Net Income Growth



# Earnings Growth

#### GAAP Diluted EPS

Non-GAAP Diluted EPS



# Q3-2013 Financial Results

	Q3 – 2013	Q3 – 2012	Change
Net Sales (\$M)	\$236.3	\$140.3	68%
Fully Diluted, GAAP EPS	\$1.52	\$0.91	67%
Fully Diluted, Non-GAAP EPS	\$1.68	\$0.97	73%
Cash and Short Term Investments (\$M)	\$281.1*	\$111.9	
Cash Flow from Operations (\$M)	\$108.9	\$51.2	
Diluted Shares Outstanding	62.1	61.4	

\* Includes \$75 million in restricted cash. See reconciliation table in Appendix



## **Recent Updates and Trends**

- \$0.30 Dividend declared 4Q13
  - Record date: 1/17/14
  - Distribution date: 1/24/14
- 500K shares repurchased in Q413
- Board level Science and Strategic Advisory Committees formed
  - To assist in ongoing evaluation of factors contributing to the persistent and significant discount in the Company's valuation relative to its peer companies.
  - Will also assess potential strategic alternatives to address these factors





### Total Paid Acthar Rxs

### Acthar Overview



#### Flagship Product:

19 approved indications

#### Key Therapeutic Areas:

- Nephrotic Syndrome, Multiple Sclerosis Relapse, Infantile Spasms, Rheumatology Indications, Symptomatic Sarcoidosis
- Significant areas of unmet need; large growth potential

#### Strategy:

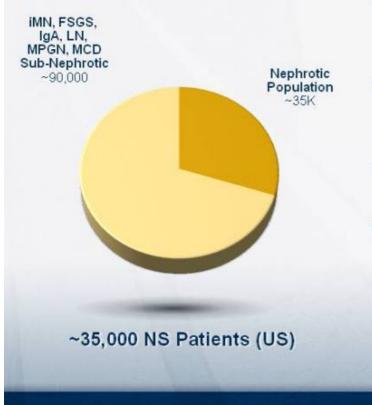
- Expand awareness, appropriate use of Acthar in key specialties
- · Develop Rheumatology and other on-label indications

\*In this presentation, the terms "Nephrotic Syndrome," "Multiple Sclerosis Relapse," "Rheumatology Indications," and "Infantile Spasms," and their abbreviations, refer to on-label indications for Acthar associated with such conditions. Investors should refer to the FDA approved Acthar label, which can be found at http://www.acthar.com/files/Acthar Pl.pdf





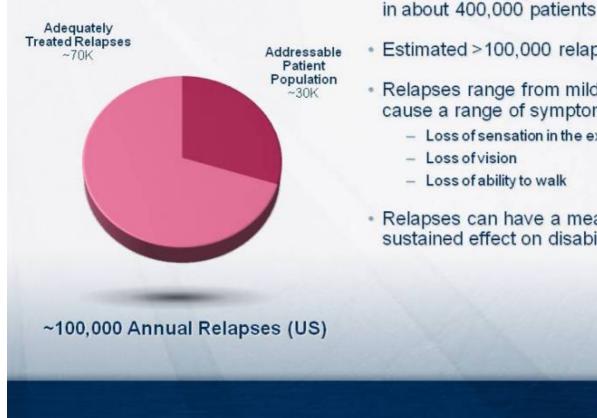
### Nephrotic Syndrome



- Characterized by excessive spilling of protein from the kidneys into the urine (nephrotic-range proteinuria)
- Caused by a number of underlying types of kidney disease (eg, iMN, FSGS, IgA nephropathy, etc.)
- Can result in end-stage renal disease (ESRD), dialysis, transplant
- Significant unmet need; few treatment options



### Multiple Sclerosis (MS) Relapse

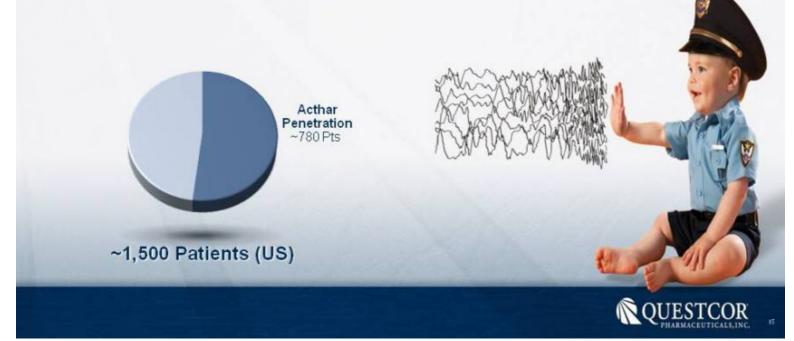


- MS is a neurodegenerative disease occurring in about 400,000 patients in the US
- Estimated >100,000 relapses/year
- Relapses range from mild to severe and can cause a range of symptoms
  - Loss of sensation in the extremities
- Relapses can have a measurable and sustained effect on disability in MS patients

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### Infantile Spasms (IS)

- Devastating, ultra-rare form of childhood epilepsy
- Can cause permanent developmental disabilities, increased mortality
- Acthar is often considered the "gold standard" and is currently used to treat ~50% of IS patients

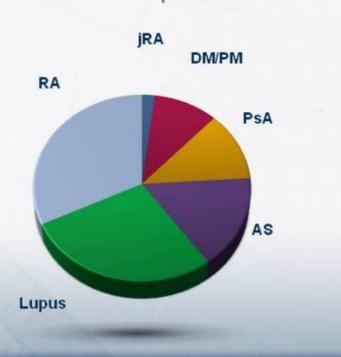


### Rheumatology Acthar's Largest Market Opportunity

#### Rheumatology-related indications on the Acthar label\*

- Dermatomyositis/Polymyositis
- Systemic lupus erythematosus
- Rheumatoid arthritis adjunctive therapy or in selected cases low-dose mainten ance therapy
- Psoriatic arthritis short term adjunctive
- Ankylosing spon dylitis short term adjunctive
- Each can pose a serious health risk if not adequately controlled
- Some cases difficult to manage; Acthar is an additional FDA-approved treatment option
- Positive initial uptake; expanded Rheum Sales Force from 12 to 62 reps

\*See http://www.acthar.com/files/Acthar-Pl.pdf for specific label information.

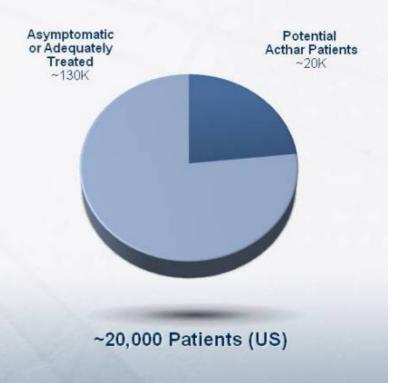


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#### Approximately 250,000 combined patients (US) are believed to be in need of additional treatment options

### Initiating a Pilot Commercialization Effort in Pulmonology

- Acthar is approved for the treatment of respiratory manifestations of symptomatic sarcoidosis
  - A systemic inflammatory disease where cell nodules or granulomas can manifest in multiple organs, most often in the lungs
  - Cause is unknown
  - May be asymptomatic or chronic and may cause death; difficult to treat





# Mostly Large Addressable Markets with Growth Potential (U.S. Only)

Indication	Potential Acthar Patient Population	% Acthar Penetration (estimated)
IEUROLOGY		
Infantile Spasms	1,500	52%
Multiple Sclerosis Flares	30,000	18%
RHEUMATOLOGY		
PM/DM	20,000	2%
Rheumatoid Arthritis	80,000	0.5%
Lupus	70,000	0.4%
Ankylosing spondylitis	50,000	0.04%
Psoriatic arthritis	30,000	0.2%
DTHER		
Nephrotic Syndrome	35,000	9%
Sarcoidosis	20,000	0.2%



## Synacthen (tetracosactide) Overview

- Acquired license to develop and commercialize Synacthen and Synacthen Depot in U.S.
- Rights to develop and commercialize in over three dozen countries\*
  - Opportunity to reinvigorate Synacthen and provides platform for potential international growth
- Expands presence in inflammatory and autoimmune disorders
  - Provides foundation for next generation melanocortin peptide therapeutics
- Further diversifies business

\*Subject to certain closing conditions



# Advancing Our Understanding of Acthar and Melanocortin Peptides

- One of 9 families of hormones produced by the pituitary, the "master gland"
- Believed to modulate the immune system and associated inflammatory process through binding to 5 melanocortin receptors
  - MC1R, MC2R, MC3R, MC4R, and MC5R
  - Differences in chemical structure influence binding affinity
- Questcor currently has two distinct melanocortin-peptide based products
  - Acthar (porcine ACTH 1-39); Synacthen (tetracosactide)



## Acthar Mechanism of Action

#### Clinical observations

- Acthar has been shown to have increased efficacy vs. corticosteroids in infantile spasms
- Acthar has been successfully used to induce remission of proteinuria in nephrotic syndrome without uremia of the idopathic type (e.g., iMN, FSGS, IgA nephropathy)<sup>1</sup>
- Preclinical observations demonstrate steroid-independent anti-inflammatory, immuno-modulatory properties of ACTH & other MC peptides<sup>2</sup>

1: Bomback et al, Am J Nephrol 2012;36:58–67 2: Gong et al, Kidney International, 83, January 2013



# Implications of Acthar and Other Melanocortins (Synacthen and new MCs)

- · We now believe Acthar and other melanocortin peptides impact
  - Immune system
  - Inflammatory process
  - Some cell function
  - Homeostasis
- Dozens of moderate-to-severe medical conditions may benefit from Acthar or other melanocortin peptide therapeutics



# Significantly Increasing Investment in R&D

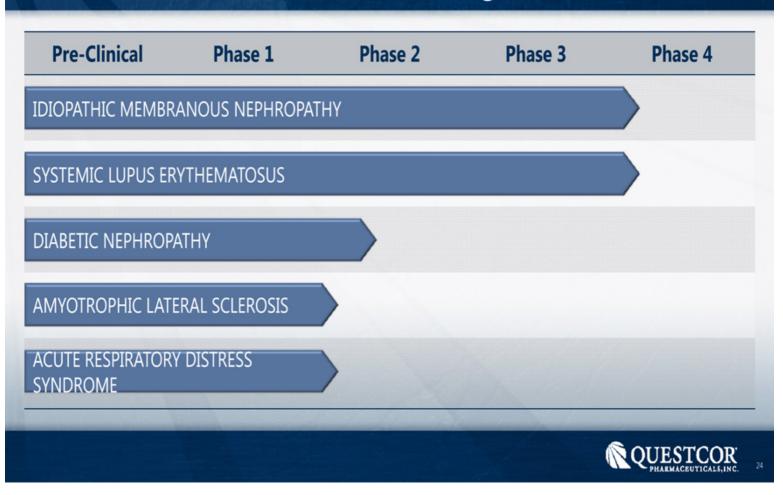
- Have funded or have approved funding for studies covering both on label and potential new indications
  - Company sponsored pre-clinical and clinical studies
  - Independent physician sponsored studies
- Investigating potential biological properties of Acthar
  - Direct effect on biochemical pathways, cells and tissues
  - Immunomodulation and anti-inflammatory properties





#### R&D Investment (\$M)

### Expanding the Body of Evidence for On-Label and New Indications/Targets



# ALS Phase 2 Open-Label Safety Study for Acthar

### Goals

- Assess short-term safety and tolerability of Acthar in ALS
- Inform dosage selection for future studies
- Study Design
  - Enroll up to 40 patients at multiple sites in U.S.
  - 8-week treatment, plus optional 28-week open label extension
  - Patients randomized to one of four dosing regimens

Findings to Drive Design for Pivotal Efficacy Study



# ARDS Phase 2 Safety and Efficacy Study for Acthar

#### Goals

- Determine if Acthar increases number of ventilator-free days during 28-day treatment period
- Assess if Acthar reduces mortality, organ failure, length of hospital or ICU stay
- Inform dosage selection for future studies
- Study Design
  - 4-week randomized, placebo controlled trial
  - Enroll up to 210 patients at up to 40 sites in U.S.
  - Patients randomized to one of six dosing regimens

Findings to Drive Design for Pivotal Efficacy Study



# Committed to Creating Long Term Value for Shareholders

- Continued stewardship of Acthar and Synacthen
- Demonstrated ability to execute
- Long term investment in R&D -- doubled R&D spending in 2012 and 2013 (projected)
- · Highly selective, strategic diversification
- Have returned \$441 million to shareholders through share repurchases and dividends\*
  - 22.7 million shares repurchased
  - 5.8 million shares remain available for repurchase under share repurchase program\*
- Quarterly dividend increased twice during 2013; \$0.30/share

\*Data as of 12/11/13



# Strong Platform for Growth

#### Increasing penetration of current Acthar markets and expanding sales into new, approved indications

- NS and MS market penetration remains modest
- Rheumatology is a new Acthar market in very early development; growing rapidly
- Pilot selling effort beginning soon in pulmonology for symptomatic sarcoidosis
- Possible Acthar role in dermatology and ophthalmology indications being evaluated for commercial potential
- Untapped international market opportunities
  - Developing international markets for Synacthen and Acthar
- Developing new indications for Acthar, Synacthen and potentially other melanocortin therapeutics
- Strong free cash flow generation enables possible product acquisitions/partnering



# NASDAQ: QCOR December 2013



### Reconciliation of Non-GAAP Adjusted Financial Disclosure

	Three Months Ended Nine Months E September 30, September 3			
	2013	2012	2013	2012
Adjusted net income	\$104,368	\$59,427	\$233,328	\$143,943
Share-based compensation expense (1)	(5,269)	(2,855)	(13,807)	(6,908)
Depreciation and amortization expense (2)	(3,127)	(226)	(6,253)	(638)
Interest expense associated with contingent consideration (3)	(188)	0	(572)	0
Interest expense associated with R&D liability in conjunction with acquisition of Synacthen (4)	(1,141)	0	(1,140)	0
Compensation expense associated with BV Trust (5)	(202)	0	(534)	0
Foreign currency transaction loss (6)	0	0	(329)	0
Medicaid adjustment for 2002 - 2009 (7)	0	0	(7,751)	0
BioVectra purchase price adjustment (B)	0	0	169	0
Impairment of purchased technology (9)	0	(659)	(485)	(662)
Net income – GAAP	\$94,441	\$55,687	\$202,626	\$135,735
Adjusted net income per share - basic	\$1.77	\$1.01	\$4.00	\$2.36
Share-based compensation expense (1)	(0.09)	(0.05)	(0.24)	(0.11)
Depreciation and amortization expense (2)	(0.05)	0.00	(0.11)	(0.01)
Interest expense associated with contingent consideration (3)	0.00	-	(0.01)	-
Interest expense associated with R&D liability in conjunction with acquisition of Synacthen (4)	(0.02)		(0.02)	
Compensation expense associated with BV Trust (5)	0.00	-	(0.01)	-
Foreign currency transaction loss (6)	-	-	(0.01)	-
Medicaid adjustment for 2002 - 2009 (7)	-	-	(0.13)	-
BioVectra purchase price adjustment (8)	-	_	0.00	_
Impairment of purchased technology (9)		(0.01)	(0.01)	(0.01)
Net income per share – basic	\$1.60	\$0.95	\$3.47	\$2.23
Adjusted net income per share - diluted	\$1.68	\$0.97	\$3.82	\$2.25
Share-based compensation expense (1)	(80.0)	(0.05)	(0.23)	(0.11)
Depreciation and amortization expense (2)	(0.05)	0.00	(0.10)	(0.01)
Interest expense associated with contingent consideration (3)	0.00	-	(0.01)	-
Interest expense associated with R&D liability in conjunction with acquisition of Synacthen (4)	(0.02)		(0.02)	
Compensation expense associated with BV Trust (5)	0.00	-	(0.01)	-
Foreign currency transaction loss (6)	-	-	(0.01)	-
Medicaid adjustment for 2002 - 2009 (7)	-	-	(0.13)	-
BioVectra purchase price adjustment (8) Impairment of purchased technology (9)	-	(0.01)	0.00 (0.01)	(0.01)
Net income per share – diluted	\$1.52	\$0.91	\$3.32	\$2.12
Net sales - Questcor	\$227,296	\$140,339	\$531,113	\$348,760
Net sales - BioVectra	9,050	0	24,935	0
Consolidated net sales Medicaid adjustment	236,346	140,339	556,048 11,500	348,760
Medicaid adjustment Adjusted consolidated net sales	\$236.346	\$140.339	\$567,548	\$348,760
Nyasica Colovinatica TRE MRS	22,30,340	3140,223	3201,245	3340,700

#### Notes to Reconciliation of Non-GAAP Adjusted Financial Disclosure

Net income per share - basic and diluted may not foot due to rounding

Use of Non-GAAP Financial Measures

Our "non-GAAP adjusted net income" excludes the following items from GAAP net income:

- 1. Share-based compensation expense
- Depreciation and amortization expense, including amortization expense on our purchased intangibles
- Interest expense associated with the net present value adjustment on our contingent consideration
- 4. Interest expense associated with the net present value adjustment on the R&D liability in conjunction with acquisition of Synacthen
- 5. Compensation expense associated with the BV Trust agreement
- 6. Foreign currency transaction loss
- 7. Medicaid adjustment for prior period 2002 2009
- BioVectra purchase price adjustment related to a labor rebate received in the second quarter 2013
- 9. Impairment of purchased technology related to our acquisition of Doral



# Reconciliation of Non-GAAP Adjusted Financial Disclosure

	20	09		2010		2011		2012	1	TIM 2013
Adjusted Net Income		\$29,242		\$38,988		\$83,956		\$209,644		\$299,033
Stock-based Compensation		(2,310)		(2,649)		(5,128)		(10,502)		(17,396
Depreciation & Amortization Expense		(303)		(352)		(731)		(811)		(6,428
Other non-cash expense (income) related to acquisition of BioVectra		0		0		0		0		(1,266
Other non-cash expense (income) related to acquisition of Synacthen		0		0		0		0		(1,140
Medicaid adjustment for 2002-2009		0		0		0		0		(7,751
Tax adjustments		0		(916)		1,702		0		0
Impairment of goodwill		0		0		(209)		(656)		(485
GAAP Net Income		\$26,629		\$35,071		\$79,591		\$197,675		\$264,566
Adjusted Net Income per Share - Basic	\$	0.46	\$	0.63	\$	1.34	\$	3.48	\$	5.12
Stock-based Compensation		(0.04)		(0.04)		(0.08)		(0.17)		(0.30
Depreciation & Amortization Expense		(0.00)		(0.01)		(0.01)		(0.01)		(0.11
Other non-cash expense (income) related to acquisition of BioVectra		-		-		-		-		(0.02
Other non-cash expense (income) related to acquisition of Synacthen						-				(0.02
Medicaid adjustment for 2002-2009										(0.13
Ohio CAT				(0.01)		0.03				-
Impaiment of goodwill		-				(0.00)		(0.01)		(0.01
GAAP Net Income per Share - Basic	\$	0.41	\$	0.56	\$	1.27	\$	3.28	\$	4.54
Adjusted Net Income - per Share Diluted	s	0.44	s	0.60	S	1.27	s	3.33	s	4.89



### Strong Platform for Growth

- 1.1 Infantile Spasms:
  - H.P. Acthar Gel (reposed treatment of infantile

#### 1.2 Multiple Sclerosis:

- H.P. Acthar Gel (repose exacerbations of multitobe effective in spective in spective is no evidence to be effective in the spectime is no evidence to be effective in the spectime is no evidence to be effective in the spectrum of the spectrum
- 1.3 Rheumatic Disorders:
  - As adjunctive therapy exacerbation) in: Psor (selected cases may r

#### 1.4 Collagen Diseases:

 During an exacerbatic systemic lupus erythe isms in infants and children under 2 years of age.

#### 1.3 Rheumatic Disorders:

 As adjunctive therapy for short-term administration (to tide the patient over an acute episode or exacerbation) in: Psoriatic arthritis; Rheumatoid arthritis, including juvenile rheumatoid arthritis (selected cases may require low-dose maintenance therapy); Ankylosing spondylitis.

#### • 1.4 Collagen Diseases:

During an exacerbation or as maintenance therapy in selected cases of: systemic lupus erythematosus, systemic dermatomyositis (polymyositis).



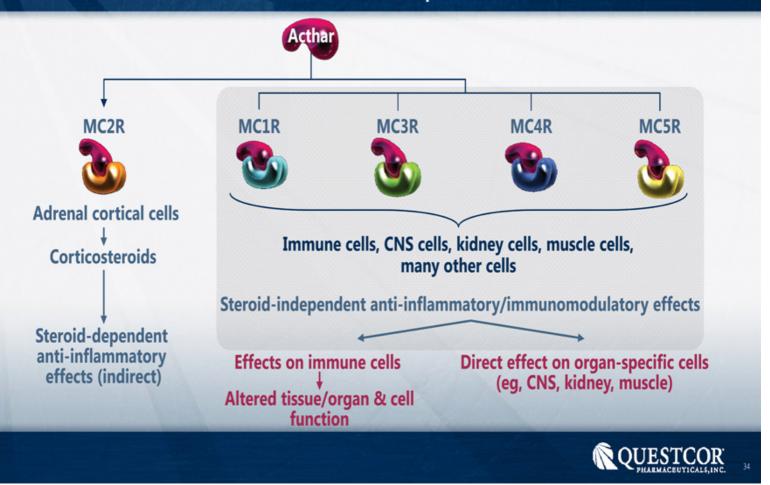
# How Does Acthar Work?

- Treats autoimmune/inflammatory process associated with the pathophysiology<sup>1-4</sup>
- By binding to melanocortin receptors, may modulate the immune system and associated inflammatory process<sup>1,5-9</sup>
- Triggers the production of cortisol and other adrenal compounds through binding to MC2R receptors found in the adrenal cortex
- Properties extend beyond steroidogenesis<sup>1,5-9</sup>
  - Binds to melanocortin receptors found on immune cells
  - Binds to cells in many types of tissues (e.g., kidney podocytes)<sup>1,3,5,6,8,9</sup>
- Acthar components have yet to be fully characterized<sup>10</sup>
  - ACTH is believed to be the primary active component in Acthar, but there may be others

<sup>1</sup>Arnason et al. Mult Sclerosis J. 2012; <sup>2</sup>Arya et al. J Child Neuro 2012; <sup>3</sup>Bomback et al. Amer J. Neph 2012; <sup>4</sup>Levine, Drug Design, Dev & Therapy, 2012. <sup>5</sup>Catania, et al. Pharmacol Rev. 2004; <sup>6</sup>Stafstrom, et al. J Child Neuro 2011; <sup>7</sup>Manna SK, J Immunol. 1998; <sup>8</sup>Gong R. Nat Rev Nephrol. 2011; <sup>9</sup>Bohm et al. Endocrine Reviews 2012; 10H.P. Acthar Gel package insert. Questcor Pharmaceuticals, Inc., 2011.



### Melanocortin Peptides May Activate Up to Five Known Melanocortin Receptors



MCR	Tissue/Cell Expression	Potential biologic activity
MC1R	Podocytes Renal Mesangial Cells Endothelial Cells (Glomerular, Tubular, Vascular) Macrophages, Monocytes, Neutrophils Melanocytes Keratinocytes Keratinocytes Central Nervous System Chondrocytes Respiratory tract GI tract	<ul> <li>Immunomodulation(including modulation of antigen presentation; immune cell adhesion and trafficking; dampen autoimmunity; NF-κβ sequestration)</li> <li>Cytoprotection (reduction of oxidative stress)</li> <li>Ischemia-reperfusion protection Protection from LPS-induced systemic inflammatory response</li> <li>Cytoskeletal effects (regulate expression of collagen, vimentin podocyte specific proteins)</li> </ul>
MC2R	Adrenal Cortex, Adipocytes, Testis	Steroidogenesis
MC3R	Central Nervous System Macrophages	<ul> <li>Immunomodulation</li> <li>Protection from ischemia</li> </ul>
MC4R	Podocytes Renal Mesangial Cells Endothelial Cells (Glomerular, Tubular) Central Nervous System	<ul> <li>Regulation of neuroinflammation</li> <li>Cerebral ischemic protection</li> <li>Metabolic control</li> </ul>
MC5R	Central Nervous System Exocrine Glands Lymphocytes	<ul> <li>Immunomodulation</li> <li>B cell signaling</li> <li>Exocrine secretion</li> <li>Ocular immunity</li> <li>Lipid regulation</li> </ul>

## New Paid Acthar Prescriptions by Therapeutic Area\*

	Paid Rx	Comp	arison
	Q3 – 2013	Q3 – 2012	Q2 – 2013
NS	370 - 380	↑ <b>7%</b>	↓ <b>7%</b>
MS	1,370 - 1,400	↑ <b>4%</b>	↑ <b>8%</b>
IS	225 - 230	<b>↑33%</b>	↑ <b>7%</b>
Rheumatology	450 - 460	N/M	<b>↑43%</b>
Total	2,450 - 2,500**	<b>↑30%</b>	↑ <b>10%</b>

\* Includes prescriptions covered by commercial carriers, Medicare, Medicaid and Tricare in all periods regardless of the rebate percentage applicable in those periods.

\* Total number of prescriptions includes all paid prescriptions.

Based on internal company estimates



# **Biosimilar Pathways Highly Challenging**

- Complex formulation and pharmacology, with multiple receptor binding properties
  - Possibly multiple active peptides
  - Slow release gel formulation
  - Complex and not well characterized (research is ongoing)
- · Formulation and manufacturing trade secrets inherent with Acthar
- Future synthetic versions of ACTH might be possible, but in a specific indication
  - Clinical trial(s) and other development work likely required
  - Multi-year pathway; challenging IP landscape

