

PRECEDENTIAL

UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT

No. 08-4373

SHIRLEY SHERIDAN; JAMES W. ZIMMERMAN,
On behalf of themselves and others similarly situated,
Appellants

v.

NGK METALS CORPORATION;
CABOT CORPORATION;
SPOTTS, STEVENS & McCOY, INC.

D.C. Civil Action No. 06-cv-5510
(Honorable Gene E.K. Pratter)

No. 08-4374

GARY ANTHONY,
On behalf of himself and others similarly situated,
Appellant

v.

SMALL TUBE MANUFACTURING CORP.,
doing business as Small Tube Products Corp., Inc.;
ADMIRAL METALS, INC.; TUBE METHODS, INC.;
CABOT CORPORATION, Individually and
as successor in interest to Cabot Berylco, Inc.,
Kawecki Berylco Industries, Inc. and the
Beryllium Corporation c/o C.T. Corporation Systems

v.

AMETEK, INC.;
BRUSH WELLMAN INC.;
MILLENNIUM PETROCHEMICALS INC., formerly
known as National Distillers and Chemical Corporation

D.C. Civil Action No. 06-cv-4419
(Honorable James Knoll Gardner)

On Appeal from the United States District Court
for the Eastern District of Pennsylvania

Argued January 11, 2010

Before: SCIRICA, BARRY and SMITH, *Circuit Judges*.

(Filed June 7, 2010)

RUBEN HONIK, ESQUIRE (ARGUED)

STEPHAN MATANOVIC, ESQUIRE

Golomb & Honik

1515 Market Street, Suite 1100

Philadelphia, Pennsylvania 19107

Attorneys for Appellants

THOMAS C. DeLORENZO, ESQUIRE (ARGUED)

RONDA K. O'DONNELL, ESQUIRE

Marshall, Dennehey, Warner, Coleman & Goggin

1845 Walnut Street, 19th Floor

Philadelphia, Pennsylvania 19103

Attorneys for Appellee, NGK Metals Corporation

NEIL S. WITKES, ESQUIRE (ARGUED)

KATHLEEN B. CAMPBELL, ESQUIRE

Manko, Gold, Katcher & Fox

401 City Avenue, Suite 500

Bala Cynwyd, Pennsylvania 19004

Attorneys for Appellee,

Cabot Corporation, Individually and as successor

in interest to Cabot Berylco, Inc., Kawecki Berylco

Industries, Inc. and the Beryllium Corporation

c/o C.T. Corporation Systems

STEPHEN J. IMBRIGLIA, ESQUIRE (ARGUED)

Gibbons

1700 Two Logan Square

18th and Arch Streets

Philadelphia, Pennsylvania 19103

Attorney for Appellee,

Spotts, Stevens & McCoy, Inc.

SHARON F. McKEE, ESQUIRE

KENNETH J. WARREN, ESQUIRE

Hangley, Aronchick, Segal & Pudlin

One Logan Square, 27th Floor

18th and Cherry Streets

Philadelphia, Pennsylvania 19103

Attorneys for Appellee,

Small Tube Manufacturing Corp.,

d/b/a Small Tube Products Corp., Inc.

ROCHELLE M. FEDULLO, ESQUIRE

Wilson, Elser, Moskowitz, Edelman & Dicker

The Curtis Center, Suite 1130 East

Independence Square West

601 Walnut Street

Philadelphia, Pennsylvania 19106

Attorney for Appellee, Admiral Metals, Inc.

GREGORY W. FOX, ESQUIRE
STEPHEN M. HLADIK, ESQUIRE
DAVID C. ONORATO, ESQUIRE
Kerns, Pearlstine, Onorato & Hladik
298 Wissahickon Avenue
Upper Gwynedd, Pennsylvania 19446
Attorneys for Appellee, Tube Methods, Inc.

JOHN C. GOODCHILD III, ESQUIRE
Morgan, Lewis & Bockius
1701 Market Street
Philadelphia, Pennsylvania 19103
Attorney for Appellee, Ametek, Inc.

DENNIS R. CALLAHAN, ESQUIRE
JENNIFER L. WEED, ESQUIRE
Ward, Greenberg, Heller & Reidy
Eight Tower Bridge, Suite 900
161 Washington Street
Conshohocken, Pennsylvania 19428

JEFFERY D. UBERSAX, ESQUIRE (ARGUED)
MICHAEL A. PLATT, ESQUIRE
Jones Day
North Point
901 Lakeside Avenue
Cleveland, Ohio 44114
Attorneys for Appellee, Brush Wellman, Inc.

JOSEPH M. PROFY, ESQUIRE

Blank Rome

One Logan Square

130 North 18th Street

Philadelphia, Pennsylvania 19103-6998

Attorney for Appellee,

Millennium Petrochemicals, Inc.,

f/k/a National Distillers and Chemical Corporation

OPINION OF THE COURT

SCIRICA, *Circuit Judge*.

This is a diversity case. In these putative class actions seeking medical monitoring, we determine whether, under Pennsylvania law, a person exposed to beryllium above background levels, absent sensitization, can be at a “significantly increased risk” of contracting chronic beryllium disease. There are two separate appeals. Plaintiffs in each case filed a putative class action lawsuit against multiple defendants, alleging negligence in connection with beryllium exposure and seeking a medical monitoring trust fund based on their increased risk of developing chronic beryllium disease. In the first action, No. 08-4374 (the “Anthony action”), the District Court granted defendants’ joint motion for summary judgment. In the second action, No. 08-4373 (the “Zimmerman action”), the District

Court addressed three separate legal issues—medical monitoring under Pennsylvania law, claim preclusion, and third-party liability—and issued final orders in favor of defendants.¹ As a consequence, neither action addresses the class certification issues. Plaintiffs appeal. We will affirm.

I.

A.

Both cases are based on exposure to beryllium, a steel-gray metal produced from naturally occurring beryl ore. Beryllium is an extremely stiff, light metal with a high melting point and excellent thermal and electrical conductivity. Because of these properties, beryllium is used as structural material for high-speed aircraft, missiles, space vehicles, and communications satellites. It is also used in radiation windows for x-ray tubes, and as a reflector and moderator in nuclear reactors. Although it is occasionally used as a pure metal, it is more commonly incorporated at low levels into alloys.

Beryllium is highly toxic, odorless, and tasteless. Inhaling beryllium particles can lead to scarring of the lungs, a condition known as chronic beryllium disease (“CBD”). CBD

¹In its first order, the court granted defendants’ motion to dismiss plaintiff Shirley Sheridan on claim preclusion grounds, and also granted defendant Spotts, Stevens & McCoy’s motion for judgment on the pleadings. In its second order, the court granted summary judgment to the remaining defendants.

occurs when the immune system mounts an attack against beryllium particles that have entered the body. The lung sacs become inflamed and fill with large numbers of white blood cells that accumulate wherever beryllium particles are found. The cells form balls around the particles called granulomas. Eventually, the lungs become scarred and lose their ability to transfer oxygen to the blood stream. This leads to shortness of breath, chronic cough, fatigue, fever, loss of appetite, and, potentially, death.

Although some scientific studies suggest there may be a relationship between the level of beryllium exposure and the likelihood of developing CBD, exposure itself appears to be insufficient because only persons who have a particular genetic “marker”—the Human Leukocyte Antigen (HLA)-DPB1 allele—can potentially recognize beryllium in the lungs as an antigen. This reaction is called beryllium sensitization (“BeS”). The parties do not dispute that BeS is a necessary precursor to CBD. BeS itself causes no abnormal lung function and requires no treatment (i.e., it is asymptomatic). But when the reaction leads to the formation of granulomas in the lungs, BeS has progressed to CBD. Some studies show this temporal progression varies—the development of CBD in a sensitized person has ranged from months to several years. However, some sensitized individuals have not developed CBD, and a small percentage of them have become “desensitized.”

Multiple studies have attempted to determine the percentage of the population that is genetically predisposed, or

“susceptible,” to CBD. The results so far are inconclusive and disputed. There are substantial disagreements between the expert opinions in these cases: Craig S. Glazer, M.D., M.S.P.H., F.C.C.P., an expert for plaintiff Gary Anthony, stated that 30–40% of the population has the genetic marker, while Lawrence H. Repsher, M.D., F.C.C.P., defendants’ expert in the Anthony action, stated that only 1–3% of the overall population can become sensitized—that is, only this percentage has the genetic marker. And in another study, researchers found that 3–10% of workers exposed to occupational beryllium may develop CBD or BeS.² Once a person is sensitized, the data also varies on the likelihood that person will develop CBD. While Dr. Glazer declared that more than 50% of individuals with BeS will develop CBD, another study found that 6–8% of persons with BeS develop CBD each year, but refused to speculate on the total progression rate from BeS to CBD.³

Because BeS is asymptomatic, scientists have developed tests to determine whether a person is sensitized. Although lung biopsies, chest x-rays, and computed axial tomography (CAT)

²See Lisa A. Maier et al., *Recent Chronic Beryllium Disease in Residents Surrounding a Beryllium Facility*, 177 Am. J. of Respiratory and Critical Care Med., 1012, 1016 (2008).

³Lee S. Newman et al., *Beryllium Sensitization Progresses to Chronic Beryllium Disease*, 171 Am. J. of Respiratory and Critical Care Med., 54, 58 (2005).

scans of the chest can be used to diagnose BeS and CBD, the most common test for sensitization is the beryllium lymphocyte proliferation test (“BeLPT”). Developed in its modern form in the 1980s, the BeLPT is performed by extracting lymphocytes from blood or lung lavage fluid and exposing them to beryllium. If the lymphocytes proliferate in response to beryllium, then the BeLPT is “positive,” which means that the individual’s immune system has begun to recognize beryllium as an antigen. Due to the risk of false positives, it is generally accepted that two positive blood BeLPTs, or one positive BeLPT performed on lung lavage fluid, are required to demonstrate sensitization. But a negative BeLPT result is not necessarily indicative of future results—the test only reflects a person’s current reaction (or lack thereof) to beryllium.

In summary, the pathogenesis of CBD is as follows: (1) a person is exposed to beryllium; (2) based on exposure and one’s genetic predisposition, he may develop BeS; and (3) that sensitization may (or may not) eventually lead to CBD. Although BeS is a necessary precursor to CBD, the progression rate from BeS to CBD is varied and uncertain, dependent on a multitude of factors, many of which are unknown.

B.

Beryllium was discovered in 1798, but its use in the United States can be traced back only to World War II and the Cold War era, when the United States government purchased significant quantities of the metal to produce weapons and

aircraft, primarily from Brush Wellman and The Beryllium Company.⁴ Although the government's need for beryllium has declined, a private sector market has developed as manufacturers of metal-based products such as automobiles, golf clubs, bicycles, dental appliances, and computers have begun to use beryllium alloys.

As early as the 1940s, workers at beryllium plants were showing signs of CBD. Because the Atomic Energy Commission ("AEC") was the initial purchaser of beryllium, it developed the first safety guidelines for beryllium use. In 1949, it adopted a standard of 2 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) of air averaged over an eight-hour period. *See Morgan v. Brush Wellman, Inc.*, 165 F. Supp. 2d 704, 710–11 (E.D. Tenn. 2001) (providing a brief history of the regulation of beryllium). In 1971, the Occupational Safety and Health Administration ("OSHA") adopted the 2 $\mu\text{g}/\text{m}^3$ standard and also recommended a peak concentration of 25 $\mu\text{g}/\text{m}^3$ of air for a maximum duration of thirty minutes. 29 C.F.R. § 1910.1000. The Department of Energy ("DOE") then promulgated the most recent regulations, maintaining the exposure limit set by the AEC, but also requiring the use of periodic medical surveillance and the implementation of worker protection programs when the level of airborne concentration of beryllium exceeds 0.2 $\mu\text{g}/\text{m}^3$. 10 C.F.R. §§ 850.3, .22, .23. Other governmental agencies also

⁴Cabot Corporation, a defendant in both cases, is the successor-in-interest to The Beryllium Company.

have issued recommendations for beryllium levels. The Environmental Protection Agency (“EPA”) promulgated its own rule, limiting exposure to $0.01 \mu\text{g}/\text{m}^3$ of air averaged over a thirty-day period. 40 C.F.R. § 61.32. The National Institute for Occupational Safety and Health (“NIOSH”) has collaborated with Brush Wellman by conducting multiple studies on exposed employees to better understand the relationship between beryllium exposure, the HLA-DPB1 marker, BeS, and CBD.

In addition to government standards and studies, both private and public employers have implemented screening programs for their employees. Brush Wellman, the predominant producer of beryllium products in the United States today, began providing the BeLPT to its employees at some of its beryllium plants in the early 1990s, and created a formal screening program in 1999. Similarly, OSHA personnel who have participated in inspections of industries where beryllium is used are offered the opportunity to be medically monitored for beryllium disease.

II.

Both the Anthony action and the Zimmerman action were filed in 2006 in the Philadelphia County Court of Common Pleas and were timely removed to the United States District Court for the Eastern District of Pennsylvania under the Class Action Fairness Act of 2005 (“CAFA”), Pub. L. No. 109-2, 119 Stat. 4 (codified in scattered sections of 28 U.S.C.), where Judge Gardner presided over the Anthony action and Judge Pratter

presided over the Zimmerman action.⁵ Both courts granted defendants' respective motions to dismiss, for judgment on the pleadings, and for summary judgment.⁶ Although we denied plaintiffs' motion to consolidate the Anthony and Zimmerman appeals, our opinion resolves both actions.⁷

⁵Although the cases present similar legal issues, they arise out of different locations and distinct facts. With that said, plaintiffs' lawyers, many of the expert witnesses, and one defendant, Cabot, are the same in each case.

⁶The District Court in both proceedings—the Anthony action and the Zimmerman action—had jurisdiction under 28 U.S.C. §§ 1332(d)(2)(A) and 1453. Defendants in each proceeding properly removed their respective actions under CAFA. The court in the Zimmerman case had supplemental jurisdiction over the third-party claims, discussed *infra*, under 28 U.S.C. § 1367. We have jurisdiction under 28 U.S.C. § 1291 because the May 21, 2008 and September 18, 2008 orders in the Zimmerman action and the September 30, 2008 order in the Anthony action were final orders of the District Court.

⁷Judge Pratter issued a May 21, 2008 order granting (1) Spotts, Stevens & McCoy's motion to dismiss Zimmerman and Sheridan's claim, and (2) Cabot's motion for judgment on the pleadings against Sheridan. That order preceded Judge Pratter's September 18, 2008 summary judgment order and Judge Gardner's September 30, 2008 summary judgment order, both

A.

Gary Anthony worked at the U.S. Gauge Plant in Sellersville, Pennsylvania from May 1972 to May 2004. U.S. Gauge used beryllium-based products to manufacture various commercial goods, causing the emission of respirable beryllium dust, particles, and fumes in the facility. Anthony commenced a putative class action, of which he is the sole representative, comprising all current and former employees of U.S. Gauge who were exposed to a beryllium-containing product at the facility for a period of at least one month while employed there. Defendants are U.S. Gauge's suppliers of beryllium-based products (Small Tube Manufacturing Corp., Admiral Metals, Inc., Tube Methods, Inc., and Cabot Corp.), as well as three third-party defendants.⁸ Anthony's Complaint asserts a single

of which addressed the merits of the respective plaintiffs' medical monitoring claims. But because medical monitoring is the focus of each action, we address those claims first.

⁸The third-party defendants include (1) Ametek, owner and operator of U.S. Gauge; (2) Brush Wellman, Inc., which allegedly provided Tube Methods with the beryllium-containing material; and (3) Millennium Petrochemicals Inc., which is the successor to National Distillers and Chemical Corp., a company that entered into an asset purchase agreement with Small Tube and agreed to defend certain product liability claims. Because all defendants and third-party defendants joined in the motion

negligence claim in which he contends that members of the proposed class were exposed to beryllium during their employment, which resulted in an increased risk of contracting CBD. He seeks the establishment of a medical monitoring trust fund for the benefit of the putative class. Medical monitoring would include testing, examination, and preventative and diagnostic screening for BeS and CBD.

Defendants removed the action to federal court and filed a joint motion for summary judgment. The court granted limited discovery. Anthony presented two experts, Adam M. Finkel, Sc.D., M.P.P., CIH, and Dr. Glazer; defendants presented one expert, Dr. Repsher. The parties agreed on the aforementioned pathogenesis of CBD, the fact that BeS is a necessary precursor to developing CBD, and that two positive blood BeLPTs are necessary to show sensitization. They also stipulated that Anthony had taken one blood BeLPT, which was negative, and accordingly he was not beryllium sensitized. But they disagreed on when “significantly increased risk” attaches to persons exposed to beryllium. The gist of Dr. Glazer’s and Dr. Finkel’s testimony is that all individuals exposed to beryllium at above-background levels are at a significantly increased risk and require medical monitoring. Dr. Finkel also declared that there is a direct relationship between the level of exposure and risk, and that CBD is not “qualitatively different from any other

for summary judgment, we refer to them collectively as “defendants.”

environmental disease, for which susceptibility is continuous (not either/or) and for which both susceptibility and exposure matter fundamentally.” Decl. of Dr. Finkel (Anthony action) ¶ 17. In contrast, Dr. Repsher opined that given Anthony’s negative BeLPT result and the fact that only a small percentage of the population can become sensitized, Anthony was not at a significantly increased risk of developing CBD. Decl. of Dr. Repsher (Anthony action) ¶ 11.

Judge Gardner granted defendants’ summary judgment motion against Anthony. Applying Pennsylvania law, the court looked to the seven-element test for a medical monitoring claim set forth in *Redland Soccer Club, Inc. v. Dep’t of the Army*, 696 A.2d 137 (Pa. 1997), and focused on whether “as a proximate result of the exposure,” Anthony had “a significantly increased risk of contracting a serious latent disease.” *Id.* at 145. It then looked to the Pennsylvania Superior Court’s decision in *Pohl v. NGK Metals Corp.*, 936 A.2d 43 (Pa. Super. Ct. 2007), *alloc. denied*, 952 A.2d 678 (Pa. 2008), the only state appellate court opinion to apply *Redland Soccer* to a medical monitoring claim for exposure to beryllium. Because the plaintiffs in *Pohl* were not beryllium sensitized and had not otherwise made a plausible showing that they faced a “significantly increased risk” of developing CBD, the Superior Court held that these plaintiffs had failed to make a *prima facie* showing of their medical

monitoring claim under *Redland Soccer. Anthony v. Small Tube Mfg. Corp.*, 580 F. Supp. 2d 409, 428 (E.D. Pa. 2008).⁹

Judge Gardner read *Pohl* as a fact-specific decision, but concluded that the expert opinions Anthony presented were “merely assumptions and speculation, rather than opinions” because they were not supported by data from the U.S. Gauge Plant. *Id.* at 426–27. Because Anthony was not sensitized to beryllium and had not presented alternative evidence to raise a genuine issue of material fact regarding the risk of developing CBD, the court granted defendants’ summary judgment motion. *Id.* at 428.

B.

James Zimmerman resided within one mile of the Reading Beryllium Facility in Muhlenberg Township, Pennsylvania from 1977 to 1984. The facility extracted beryllium hydroxide and manufactured products containing beryllium from 1936 to 2000. Zimmerman, together with Shirley Sheridan, discussed *infra*, commenced a putative class action lawsuit. The Complaint is almost identical to the Anthony Complaint—it asserts one negligence claim in which

⁹The court rejected Anthony’s attempt to distinguish *Pohl* based on the means of exposure—occupational exposure versus community exposure—finding Anthony’s own experts belied this distinction. *Anthony*, 580 F. Supp. 2d at 425–26. Anthony does not raise this argument on appeal.

plaintiffs contend that because of their residency in close proximity to the Reading Plant they were exposed to beryllium particles in the ambient air. Defendants include NGK Metals Corp., owner and operator of the Reading Plant from 1986 through 2000; Cabot Corp., owner and operator of the plant for at least fifty years before 1986; and Spotts, Stevens & McCoy, Inc., an engineering firm that was responsible for testing and monitoring the levels of beryllium at the facility. Like Anthony, Zimmerman and Sheridan seek the establishment of a medical monitoring trust fund for themselves individually and on behalf of a putative class, which includes all persons who resided within a one-mile radius of the Reading Plant for at least six months between 1950 and 2000.

Defendants removed the action to federal court, and the parties commenced bifurcated discovery so that discovery related to the issue of class certification would be completed prior to merits discovery. Defendants Cabot and NGK Metals moved for summary judgment before the court ruled on plaintiffs' motion for class certification.¹⁰ Zimmerman provided

¹⁰Defendant Spotts, Stevens & McCoy had already been dismissed from the lawsuit. *See infra* Part II.D. By an October 6, 2008 stipulation and order, Sheridan's claim asserted against NGK Metals was dismissed with prejudice because the company did not operate the plant when she lived in the area. Similarly, the court dismissed Sheridan's claim against Cabot in a May 21, 2008 order, discussed *infra* Part II.C.

the opinions of several experts, including Lisa A. Maier, M.D., M.S.P.H., John W. Martyny, Ph.D, C.I.H., Milton Rossman, M.D., Dr. Finkel, and Dr. Glazer, the last two of whom served as experts in the Anthony action. Defendants did not submit expert testimony, relying on the *Pohl* decision to support their motion. The parties stipulated that Zimmerman was not beryllium sensitized—he tested positive on a single blood BeLPT in 2003, but in 2006 he tested negative on another blood BeLPT and on a lavage BeLPT.

Both Dr. Maier and Dr. Glazer stated that anyone who has lived in the area surrounding the Reading Plant is at a significantly increased risk given the levels of beryllium in the ambient air and documented cases of CBD in the community. Dr. Martyny provided a general history of the Reading Plant, information regarding background levels of beryllium emissions in and around the facility, and reported cases of occupational and community-based CBD. In particular, he produced samples from the community surrounding the plant that showed the mean concentration of beryllium in the air to be $0.0155 \mu\text{g}/\text{m}^3$, and the average within the first one-half mile of the plant rising to $0.028 \mu\text{g}/\text{m}^3$, significantly higher than the general background level of beryllium in the air in Pennsylvania of $0.00002 \mu\text{g}/\text{m}^3$. Decl. of Dr. Martyny (Zimmerman action) ¶ 13. Dr. Finkel provided a declaration similar to what he presented in the Anthony action, but here he made a quantitative risk assessment based on the aforementioned exposure data. He concluded that the risk of contracting CBD to the members of the proposed class

represented by Zimmerman was 3 per 10,000, and for those individuals who have lived near the Reading Plant for at least ten years, the risk increased to 1 per 500. Decl. of Dr. Finkel (Zimmerman action) ¶¶ 44–45. Dr. Rossman, who evaluated Zimmerman for signs of beryllium-related diseases in 2006, reported that because of Zimmerman’s abnormal pulmonary function studies and his one positive blood BeLPT, he had “borderline results” for which he should be tested every three to five years for the rest of his life. Decl. of Dr. Rossman (Zimmerman action) ¶¶ 4–5.

The court granted defendants’ summary judgment motion against Zimmerman. Like Judge Gardner in the Anthony action, Judge Pratter looked to *Redland Soccer* and *Pohl* to determine whether Zimmerman had made a prima facie showing of a medical monitoring claim. Applying *Pohl*, Judge Pratter said: “[B]eryllium sensitization is the appropriate point on the beryllium exposure-to-disease continuum where a defendant’s liability should attach.” *Sheridan v. NGK Metals Corp.*, 614 F. Supp. 2d 536, 549 (E.D. Pa. 2008). Because Zimmerman was not sensitized, the court held that he did not present evidence sufficient to raise a genuine issue of material fact as to his risk of contracting CBD.

C.

Like Zimmerman, Shirley Sheridan lived near the Reading Plant from 1951 to 1956. In 2002, Sheridan commenced a personal injury lawsuit against Cabot in the

United States District Court for the Eastern District of Pennsylvania, alleging negligence and strict liability, and seeking compensatory damages for beryllium-related diseases. The District Court granted Cabot's motion for summary judgment, finding that although Sheridan had been diagnosed with CBD, she had not suffered a compensable injury under Pennsylvania law. *Sheridan v. Cabot Corp.*, No. Civ. A. 02-1212, 2003 WL 22999256, at *4-5 (E.D. Pa. Mar. 12, 2003). We affirmed. *Sheridan v. Cabot Corp.*, 113 F. App'x 444 (3d Cir. 2004).

Sheridan brings this class action lawsuit with Zimmerman as a co-lead plaintiff and putative class action representative, seeking a medical monitoring fund, discussed *supra*. Cabot moved for judgment on the pleadings, arguing that Sheridan's claim was barred by the doctrine of res judicata, or claim preclusion. The District Court granted the motion, dismissing Sheridan's claim against Cabot.

D.

Spotts, Stevens & McCoy is an engineering and consulting firm that was hired by the operators of the Reading Plant to analyze and monitor beryllium levels emitted from the facility, and to ensure compliance with state and federal regulations. The putative class action initiated by Zimmerman and Sheridan asserts a claim for medical monitoring against Spotts, Stevens & McCoy, relying on § 324A of the Restatement

(Second) of Torts, which imposes liability on third persons for negligent performance of an undertaking.¹¹

Spotts, Stevens & McCoy filed a motion to dismiss under Fed. R. Civ. P. 12(b)(6), arguing that the Amended Complaint failed to allege the company owed a legal duty to plaintiffs or breached any duty. The District Court granted defendant's motion, finding that the Amended Complaint did not allege the company undertook a duty to warn the residents of the community surrounding the Reading Plant of the results of the tests it performed for the facility's owners and operators. Because § 324A imposes liability on third parties only upon their breach of a specifically undertaken duty, the court dismissed plaintiffs' claim against Spotts, Stevens & McCoy.

III.

The principal question presented by these appeals is whether Anthony and/or Zimmerman can sustain their medical monitoring claims under Pennsylvania law.¹² In *Simmons v.*

¹¹Plaintiffs' initial claim against Spotts, Stevens & McCoy was for common law negligence, which the District Court dismissed for failure to state a claim because it did not allege the firm owed a legal duty to plaintiffs. The court granted plaintiffs leave to amend the Complaint.

¹²We exercise plenary review over a district court's decision granting summary judgment. See *Prowel v. Wise Bus. Forms*,

Pacor, Inc., 674 A.2d 232, 240 (Pa. 1996), the Pennsylvania Supreme Court recognized the viability of a medical monitoring cause of action. Although the court held that a claim for damages based solely on increased risk and fear of developing a disease is too speculative and “contrary to the established jurisprudence of th[e] Commonwealth,” it stated that “recovery for medical monitoring is appropriate and just.” *Id.* In *Redland Soccer* the court articulated the elements of a common law claim

Inc., 579 F.3d 285, 286 (3d Cir. 2009). Summary judgment is proper “if the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(c). “A motion for summary judgment will not be defeated by ‘the mere existence’ of some disputed facts, but will be denied when there is a genuine issue of material fact.” *Am. Eagle Outfitters v. Lyle & Scott Ltd.*, 584 F.3d 575, 581 (3d Cir. 2009) (citing *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247–48 (1986)). We draw all inferences in a light most favorable to the nonmoving party. *Id.* A plaintiff, however, cannot avert summary judgment by resting on the allegations in his pleadings, but rather must present evidence from which a jury could find in his favor. *See Ridgewood Bd. of Educ. v. N.E. ex. rel. M.E.*, 172 F.3d 238, 252 (3d Cir. 1999).

Because plaintiffs bring only state law claims, we apply Pennsylvania’s substantive law. *See Erie R.R. Co. v. Tompkins*, 304 U.S. 64, 78 (1938).

for medical monitoring. Under Pennsylvania law, a plaintiff must prove each of the following seven factors:

(1) exposure greater than normal background levels; (2) to a proven hazardous substance; (3) caused by the defendant's negligence; (4) as a proximate result of the exposure, plaintiff has a significantly increased risk of contracting a serious latent disease; (5) a monitoring procedure exists that makes the early detection of the disease possible; (6) the prescribed monitoring regime is different from that normally recommended in the absence of the exposure; and (7) the prescribed monitoring regime is reasonably necessary according to contemporary scientific principles.

Redland Soccer, 696 A.2d at 145–46.¹³ Expert testimony is

¹³The Pennsylvania Supreme Court articulated several reasons for recognizing medical monitoring claims: (1) monitoring “promote[s] early diagnosis and treatment of disease or illness resulting from exposure to toxic substances caused by a tortfeasor’s negligence”; (2) it allows recovery for the expenses of such monitoring, which “avoids the potential injustice of forcing an economically disadvantaged person to pay for expensive diagnostic examinations necessitated by another’s negligence”; (3) it “affords toxic-tort victims, for whom other sorts of recovery may prove difficult, immediate compensation for medical monitoring needed as a result of

required to prove these elements. *Id.* The focus in these appeals is on factor four: whether plaintiffs in each action have a “significantly increased risk” of contracting CBD.

The Pennsylvania Supreme Court has not considered a medical monitoring claim for exposure to beryllium (or a toxin that creates increased risk of a disease with a similar pathogenesis to CBD), but in 2007 the Pennsylvania Superior Court squarely addressed this issue in *Pohl*. The facts in *Pohl* are similar to those in the Zimmerman action: three plaintiffs living near the aforementioned Reading Plant brought a class action lawsuit against NGK Metals and Cabot, alleging negligence and seeking a medical monitoring trust fund on behalf of all residents who resided within a six-mile radius of the Reading Plant for at least six continuous months between 1950 and 1989. *Pohl v. NGK Metals Corp.*, No. 0733, 2003 WL 24207633, at *6 (C.P. Phila. July 9, 2003). Testimony indicated that the class may have consisted of over 200,000 persons. *Id.* at *8. The state trial court denied class certification, explaining

exposure”; (4) “it furthers the deterrent function of the tort system by compelling those who expose others to toxic substances to minimize risks and costs of exposure”; and (5) it furthers an “important public health interest in fostering access to medical testing for individuals whose exposure to toxic chemicals creates an enhanced risk of disease.” *Redland Soccer*, 696 A.2d at 145 (quoting *Hansen v. Mountain Fuel Supply Co.*, 858 P.2d 970, 976–77 (Utah 1993) (internal citations omitted)).

that “[s]ince only susceptible persons can develop CBD at a given dose, because of their own immunological response to particles of beryllium, the issue of increased risk is not common to the class.” *Id.* at *10. After the Superior Court affirmed, 863 A.2d 1239 (Pa. Super. Ct. 2004), *alloc. denied*, 872 A.2d 1200 (Pa. 2005), plaintiffs proceeded in their individual capacities. Plaintiffs were not sensitized to beryllium—two of them had tested negative on a BeLPT, and the other did not take the test. The trial court granted defendants’ motion for summary judgment, stating that plaintiffs had not “presented evidence that exposure to beryllium without the allergic immune response puts one at risk for CBD.” *Pohl v. NGK Metals Corp.*, No. 0733, slip. op. at 4 (C.P. Phila. June 22, 2006), *available at* 2006 WL 3898323 (as an appendix).

On appeal, plaintiffs argued the trial court erred in finding that only sensitized individuals are at risk, especially in light of contradictory testimony by Dr. Maier, one of plaintiffs’ experts, who testified that someone exposed to beryllium can be “susceptible” to CBD without being sensitized, and that susceptibility alone places a person at risk. *Pohl*, 936 A.2d at 48. The Superior Court affirmed, holding that plaintiffs had not met their burden of showing they were at a “significantly increased risk” of contracting CBD. The court detailed testimony from each of plaintiffs’ three witnesses. Although Dr. Maier stated that susceptible individuals are still at risk, she also conceded that BeS is a necessary precursor to developing CBD, *id.* at 50, and “admitted she could not positively determine

whether [plaintiffs] were susceptible to beryllium,” *id.* at 51. Dr. Martyny, plaintiffs’ second expert, testified that exposure to beryllium at above-normal background levels creates a risk, but he could not determine whether the risk was “significant.” *Id.* Plaintiff’s third expert, Dr. Rossman, testified that 1–3% of an exposed population might develop BeS, and about half of those will contract CBD. *Id.*

The Pennsylvania Superior Court concluded that “[the] record provides no support for [plaintiffs’] contention that they are sensitive [sic] to beryllium or face a significantly increased risk of contracting CBD.” *Id.* Moreover, “[e]ven if a test were available to prove [plaintiffs] are susceptible to beryllium,” the court found that “no expert testimony supports [plaintiffs’] claim that susceptibility, absent beryllium sensitivity, creates a significantly increased risk of contracting CBD.” *Id.* Because of “expert testimony, as well as [plaintiffs’] failure to demonstrate beryllium sensitivity through positive BeLPT results,” the court found plaintiffs did not prove they were at “a significantly increased risk of developing CBD,” and thus did not present sufficient evidence to make out a *prima facie* cause of action for medical monitoring. *Id.* at 51–52. But the court explicitly stated plaintiffs could “bring another action for medical monitoring if and when they have a positive BeLPT or develop CBD.” *Id.* at 52 n.3. The Pennsylvania Supreme Court denied allocatur. 952 A.2d 678 (Pa. 2008).

Interpreting *Pohl* is central to these appeals. Defendants in both actions argue *Pohl* held, as a matter of Pennsylvania law,

that only persons with BeS are at a significantly increased risk of developing CBD. They rely on the undisputed testimony presented in the state court proceeding—that CBD is an immunological disease, and that only a small percentage of the population with the known genetic marker (the HLA-DPB1 allele) is at risk of becoming sensitized. Plaintiffs contend *Pohl* is neither controlling nor persuasive because it was a fact-specific decision in which the state court dismissed the three plaintiffs' claims based on their failure of proof.¹⁴

¹⁴Judge Gardner in the Anthony action and Judge Pratter in the Zimmerman action interpreted *Pohl* in slightly different ways, but the distinction is not one of substance. Judge Gardner explained in a footnote how his interpretation differs from that of Judge Pratter:

I . . . believe that *Pohl* implies that if in a future case there were a bona fide dispute between competing experts concerning whether or not a plaintiff could show a significantly increased risk of CBD in the absence of a positive BeLPT for beryllium sensitization, it would be for the jury to decide, and summary judgment would be inappropriate.

Therefore, I concluded that in the future the trial court must adjudicate anew on a case-by-case basis whether or not to grant summary judgment in beryllium medical monitoring cases, based upon the unique facts and testimony

Pennsylvania trial courts have had occasion to interpret the scope of the *Pohl* opinion. The Philadelphia County Court of Common Pleas created a specialized docket for beryllium exposure medical monitoring cases, which included thirty-one cases brought by fifty plaintiffs who had been exposed to beryllium but were not sensitized.¹⁵ Judge Tereshko issued an opinion on January 18, 2008, dismissing the claims of four of these plaintiffs. *See Schlott v. NGK Metals Corp.*, No. 1247, slip. op. (C.P. Phila. Jan. 18, 2008). He interpreted *Pohl* as holding “that exposure or susceptibility does not create a

presented, including any relevant expert scientific evidence.

Anthony, 580 F. Supp. 2d at 424 n.50. But immediately after making this distinction, Judge Gardner stated that “because plaintiff has no possibility of being diagnosed with CBD, he cannot show that as a proximate result of his exposure to beryllium, he has a significantly increased risk of contracting CBD, a latent disease.” *Id.* at 425. He found that *Pohl* was “premised upon the scientific fact that individuals who are not sensitized to beryllium cannot be diagnosed with CBD,” and that the science had not changed. *Id.* Thus, as an undisputed scientific conclusion, Judge Gardner’s interpretation appears to have the same practical effect as that of Judge Pratter.

¹⁵Many of the parties and their lawyers in the state trial court proceedings are the same as those involved in the actions presented here.

significantly increased risk of contracting CBD.” *Id.* at 2. He went on to find that plaintiffs had “nothing additional to offer . . . which would support their claim that exposure is sufficient to satisfy the requirement that Plaintiffs are at a significantly increased risk [of developing] beryllium disease.” *Id.* at 3. Three months later, Judge Tereshko issued twenty-seven orders granting summary judgment to defendants on the remaining cases for the same reasons set forth in his January 18 opinion. After these plaintiffs appealed, the court issued a second opinion pursuant to Pa. R. App. P. 1925(a), reaffirming its earlier decision and stating: “As was established in *Pohl*, exposure to beryllium without proof of sensitization does not create a significantly increased risk of contracting CBD.” *Anastasio v. NGK N. Am.*, No. 0116, 2009 Phila. Ct. Com. Pl. LEXIS 52, at *10 (C.P. Phila. Jan. 6, 2009). These cases are pending before the Pennsylvania Superior Court.

A.

Our role in diversity cases is to apply state law. “A federal court under *Erie* is bound to follow state law as announced by the highest state court.” *Edwards v. HOVENSA, LLC*, 497 F.3d 355, 361 (3d Cir. 2007). As noted, the Pennsylvania Supreme Court has not yet determined whether exposure to beryllium, absent sensitization, can cause a significantly increased risk of contracting CBD under Pennsylvania law, so we must predict the position the court would take on this issue. *See id.* “Where an intermediate appellate state court rests its considered judgment upon the rule

of law which it announces, that is a datum for ascertaining state law which is not to be disregarded by a federal court unless it is convinced by other persuasive data that the highest court of the state would decide otherwise.” *Budget Rent-A-Car Sys., Inc. v. Chappell*, 407 F.3d 166, 174 (3d Cir. 2005) (quoting *West v. Am. Tel. & Tel. Co.*, 311 U.S. 223, 237 (1940)). “This standard places a significant constraint on us” *Jewelcor Inc. v. Karfunkel*, 517 F.3d 672, 676 n.4 (3d Cir. 2008). Unlike our role in interpreting federal law, we may not “act as a judicial pioneer” in a diversity case. *City of Phila. v. Lead Indus. Ass’n*, 994 F.2d 112, 123 (3d Cir. 1993). Additionally, “[w]hen a state’s highest court denies review, the policy reasons for following an intermediate court decision (absent compelling evidence to the contrary) are strengthened.” *Budget Rent-A-Car*, 407 F.3d at 174 n.7. The application of an intermediate appellate court decision to actions in lower state courts provides an additional reason for federal courts to abide by the decision, as it promotes consistency of law and principles of comity. *Cf. West*, 311 U.S. at 236 (explaining that the “obvious purpose” of *Erie* and the Rules of Decision Act, which *Erie* interprets, “is to avoid the maintenance within a state of two divergent or conflicting systems of law”); *City of Phila.*, 994 F.2d at 123 (“Federalism concerns require that we permit state courts to decide whether and to what extent they will expand state common law.”).

Pohl is the highest Pennsylvania court to directly address a medical monitoring claim for exposure to beryllium. The

Pennsylvania Supreme Court twice denied allocatur, and *Pohl* has been applied to at least fifty persons in thirty-one cases in the Philadelphia County Court of Common Pleas, with a consolidated appeal pending in the Superior Court. At this point, plaintiffs have not presented “persuasive data” that the Pennsylvania Supreme Court would decide otherwise. Accordingly, we apply *Pohl*.

Although the opinion suggests that future developments in science’s understanding of the effects of beryllium exposure and its relationship with CBD may result in a different outcome, *see Pohl*, 936 A.2d at 51 (“This record provides no support for [plaintiffs’] contention that they are sensitive [sic] to beryllium or face a significantly increased risk of contracting CBD.”), it drew a line along the exposure-to-disease continuum at sensitization. Contrary to both Anthony’s and Zimmerman’s contentions, *Pohl* was not based only on a lack of proof; it was based on plaintiffs’ failure to meet the requisite threshold for establishing significantly increased risk due to (1) the undisputed facts about beryllium exposure, BeS, and CBD, and (2) plaintiffs’ inability to demonstrate a significant increase in risk before sensitization. The lack of proof in *Pohl* which Anthony and Zimmerman allege they have corrected is in fact the *Pohl* plaintiffs’ inability to prove sensitization itself. *See Pohl*, 936 A.2d at 49 (“[Defendants] insist, absent positive results from the BeLPT, [plaintiffs] lack evidence they are sensitized; thus, [plaintiffs] cannot show they face a significantly increased risk of contracting CBD. [Defendants]

suggest this lack of proof led the trial court to deny class certification We agree.”).

B.

Anthony contends the District Court prematurely granted defendants’ motion for summary judgment. According to Anthony, the court dismissed his claim only because he did not provide specific exposure levels at the U.S. Gauge facility, implying that if he had the opportunity to present this data, the court would have denied defendants’ motion. Defendants characterize the court’s decision differently, focusing on CBD’s pathogenesis and highlighting the fact that because Anthony is not sensitized, he cannot develop CBD at this time.

Anthony attempts to highlight the factual differences between the opinions of defendants’ expert, Dr. Repsher, and those of his experts, Dr. Glazer and Dr. Finkel. While Dr. Repsher opined that only 1–3% of the general population can develop CBD, Dr. Glazer stated that 30–40% of the population can develop BeS, and that CBD will develop in more than half of those individuals. Although this data shows the gaping holes in the current state of scientific research, as well as the substantial factual disagreements between scientists, it is not material to this appeal. The parties stipulated that Anthony has not developed BeS, and we do not know whether he has the genetic marker associated with CBD. Anthony must prove there is a genuine issue of material fact as to *his* risk of developing CBD absent sensitization. This background data, most of which

was also cited in *Pohl*, 936 A.2d at 50–51, is not relevant to Anthony’s individual risk.¹⁶

Dr. Finkel engaged in a quantitative risk analysis to consider the relationship between beryllium exposure and CBD. He contradicted Dr. Repsher’s declaration that only a small portion of an exposed population is at risk of contracting CBD as a result of genetic predisposition.¹⁷ Regardless, because he contended that up to 50% of the population is genetically predisposed to recognizing beryllium as an antigen, he believes that “not much is lost (in terms of over-inclusiveness) by defining the high-risk residents to include some people who may only be at risk because of extremely high exposures.” Decl. of Dr. Finkel (Anthony action) ¶ 17. These statements do not add to the evidence plaintiffs presented in *Pohl*, and do not create a material issue of fact regarding Anthony’s *individual* risk.

Moreover, as explained by the District Court, Anthony’s experts did not provide any other specific information as to his

¹⁶Anthony also challenges Dr. Repsher’s declaration under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and Rule 702 of the Federal Rules of Evidence. The District Court rejected Anthony’s arguments. We see no error, but in any case the *Daubert* ruling is not relevant in this appeal.

¹⁷In the next subsection, we discuss and reject this portion of Dr. Finkel’s declaration because (1) it is not supported by any evidence, and (2) *Pohl* rejected it.

risk of contracting CBD, and so the court granted defendants' motion for summary judgment. Anthony now contends he did not provide this information—that is, exposure data from the U.S. Gauge Plant—because he was unable to take discovery from the plant's operators. A district court shall “give a party opposing summary judgment an adequate opportunity to obtain discovery.” *Dowling v. City of Phila.*, 855 F.2d 136, 139 (3d Cir. 1988). We review for abuse of discretion. *Bradley v. United States*, 299 F.3d 197, 206 (3d Cir. 2002).

The court did not prematurely grant defendants' motion. Anthony filed an emergency motion for leave to take limited discovery in order to respond to defendants' summary judgment motion, which the District Court granted. Anthony subsequently conducted extensive discovery—his counsel subpoenaed records from Brush Wellman regarding its employee screening program and deposed Dr. Repsher—before filing his brief in opposition to the motion. But Anthony did not file an affidavit under Fed. R. Civ. P. 56(f) stating that he needed to conduct additional discovery. “We have made clear that, in all but the most exceptional cases, failure to comply with Rule 56(f) is fatal to a claim of insufficient discovery on appeal.” *Bradley*, 299 F.3d at 207. Regardless of this data, Anthony cannot prevail because under *Pohl* the threshold increase in risk to establish a medical monitoring claim under *Redland Soccer* remains at sensitization, a point along the exposure-to-disease continuum that Anthony has not reached.

C.

As noted, Zimmerman brings his class action individually and on behalf of a putative class consisting of all persons who resided within a one-mile radius of the Reading Plant for at least six months during the time period between 1950 and 2000. The facts underlying his action are similar to those under which Anthony's case arose—both plaintiffs represent putative classes consisting of persons exposed to beryllium in the ambient air, are seeking to establish a medical monitoring trust fund, and are not sensitized to beryllium. But Zimmerman's appeal presents a closer question for two reasons. First, Zimmerman tested positive to a blood BeLPT in 2003, before twice testing negative in 2006. His expert, Dr. Rossman, declared that Zimmerman's 2003 positive BeLPT as well as abnormal pulmonary function studies showed "borderline results" for which he recommended Zimmerman undergo repeat breathing studies within six months and beryllium proliferation studies every three to five years for the rest of his life. Decl. of Dr. Rossman (Zimmerman action) ¶¶ 4–5. Second, Zimmerman's experts have presented data on specific exposure levels around the Reading Plant and the number of documented cases of CBD in the community. Dr. Martyny declared that the average concentration of beryllium in the area surrounding the plant was $0.0155 \mu\text{g}/\text{m}^3$, well above the background level throughout the rest of Pennsylvania,¹⁸ and that

¹⁸The record seems to indicate that the data on the background levels is from the 1950s or 1960s.

in a 1969 investigation 92 cases of CBD were reported among both residents and workers in the vicinity of the Reading Plant. Decl. of Dr. Martyny (Zimmerman action) ¶¶ 13–14. More recently, a study showed that at least eight residents within 1.05 miles of the Reading Plant have been diagnosed with CBD.¹⁹ Dr. Finkel used this data to engage in a quantitative risk analysis, finding that the risk of contracting CBD to Zimmerman and members of his proposed class was at least 3 per 10,000.

Like Anthony, Zimmerman argues *Pohl* is not controlling. He contends sensitization does not create or increase risk, but instead manifests the already-existing risk in a way for which one can test (via the BeLPT). In other words, sensitization is only a marker along the continuum between exposure and disease. Because of the advent of the BeLPT, which is the predominant means of testing for whether one's body has begun reacting to beryllium exposure, Zimmerman argues the importance of sensitization as a risk indicator has been unnecessarily heightened. Beginning with the trial court's denial of the motion for class certification in *Pohl*, 2003 WL 24207633, at *12, sensitization has, in Zimmerman's view, incorrectly been labeled as "the point" along the exposure-to-disease continuum at which significant risk attaches. See Zimmerman Oral Argument Trans. 15–16. According to Zimmerman, more than 50% of individuals with BeS will go on to develop CBD, with an average rate of 6–8% per year; at least

¹⁹Maier et al., *supra* note 3, at 1016.

3 per every 10,000 people in the putative class will develop CBD; and there is a correlation between exposure and risk, as evidenced in one study that found 14.3% of machinists developed BeS compared to only 1.2% of employees with relatively less beryllium exposure.²⁰ Thus, Zimmerman argues, risk is created by heightened exposure, well before and independent of sensitization.²¹

²⁰Statement of Work: Collaboration on Worker Screening at the Brush Wellman Plants in Tucson, Arizona and Elmore, Ohio. *See also* Newman et al., *supra* note 3, at 56 (finding that of individuals already sensitized to beryllium, those who progressed to CBD were more likely to be machinists); Decl. of Dr. Glazer (Anthony action) ¶ 10 (stating that some employees at beryllium manufacturing facilities with relatively less exposure, like security guards and administrative personnel, have developed CBD).

²¹Both Zimmerman and Anthony argue BeS itself is a “serious latent disease” under *Redland*, or at least the beginning stage of the development of the disease. First, they cite to the 2004 Newman study, *supra* note 3, which found that BeS progresses to CBD at a rate of 6–8% per year. Second, they reference an Eleventh Circuit decision in which the court held that a genuine issue of material fact existed as to whether BeS is a compensable injury under Georgia law. *Parker v. Brush Wellman*, 230 F. App’x. 878, 884 (11th Cir. 2007). *But cf. Paz v. Brush Engineered Materials, Inc.*, 555 F.3d 383, 394–98 (5th

From Zimmerman’s perspective, exposure to beryllium is analogous to exposure to other toxins, such as asbestos and polychlorinated biphenyls (PCBs). Defendants contend CBD’s immunological nature distinguishes beryllium from other toxins, which do not invoke an allergic response in only a subset of susceptible persons and instead have a more linear exposure-to-

Cir. 2009) (holding that BeS is not a compensable injury under Mississippi law).

Plaintiffs’ arguments miss the mark. The 2004 study was inconclusive—it could not determine whether all individuals with BeS will eventually develop CBD, nor did it attempt to determine the relationship between the level of exposure and the rate of progression from BeS to CBD. The *Parker* decision interpreted Georgia law, but we are bound by Pennsylvania law, and *Pohl* appears to have rejected this argument. Although the court was presented with an expert opinion stating that BeS can “develop[] with [CBD] or before it,” 936 A.2d at 50, it did not recognize BeS as a disease under Pennsylvania law. BeS seems to be similar to asymptomatic pleural thickening caused by asbestos exposure, which the Pennsylvania Supreme Court held was not a compensable injury. *See Simmons*, 674 A.2d at 237. Just as asymptomatic pleural thickening does not entail “disabling consequences or physiological dysfunction,” *id.* at 236, so too does BeS—itsself an asymptomatic condition—not cause physical impairment or require treatment.

disease relationship.²² But Zimmerman posits that the immunological aspect of CBD is simply another element of uncertainty, which discounts risk by the percentage of the population that is not genetically susceptible to beryllium, and that exposure itself is correlated with risk.

Zimmerman cites a Pennsylvania Commonwealth Court decision, which focused on the issue of “significantly increased risk” in the context of exposure to PCBs. *See Foust v. Se. Pa. Transp. Auth.*, 756 A.2d 112 (Pa. Commw. 2000). In *Foust*, the court affirmed the certification of plaintiffs’ class, and in so doing held that proof of a significantly increased risk of contracting a serious latent disease under *Redland Soccer* will not necessarily require an individual inquiry into each plaintiff’s particular characteristics. The decision relied on testimony of experts who stated that exposure to a toxic substance above some threshold level places an individual at a significantly increased risk of contracting disease. *Id.* at 119–20.

Here, Dr. Finkel provided similar statements based on his quantitative risk assessment, concluding that the beryllium level in the ambient air in the community surrounding the Reading Plant was over the threshold for establishing significantly

²²Dr. Glazer’s testimony in one of the post-*Pohl* actions now pending before the Pennsylvania Superior Court supports this distinction. *See* Deposition of Dr. Glazer, at 177–78, *Harris v. NGK N. Am., Inc.*, No. 04388 (C.P. Phila. Dec. 13, 2007).

increased risk.²³ But as he conceded in his declaration, the legal threshold that constitutes a “significant” increase in risk is not a scientific question. Decl. of Dr. Finkel (Zimmerman action) ¶ 32. And whatever the requisite threshold is, *Pohl* rejected Dr. Finkel’s assertion that mere exposure reaches it.

Dr. Finkel also opined that

the various genetic “markers” that appear to have some association with the propensity to develop

²³He stated:

Based on my scientific understanding of the risk of contracting beryllium disease as a function of duration and intensity of exposure, I can state to a reasonable degree of scientific certainty that the members of the proposed class face a significantly increased risk of contracting CBD

The most important determinant of the risk of CBD is the duration and intensity of exposure to beryllium in the environment (or workplace). Although science may come to understand in the future that only “susceptible” persons are at substantially elevated risk relative to the remainder of the population, at the present time there is no basis for concluding that persons “non-susceptible to CBD” exist or can be exposed with impunity.

Decl. of Dr. Finkel (Zimmerman action) ¶¶ 40–41.

CBD . . . do not begin to establish that CBD is qualitatively different from any other environmental disease for which susceptibility is continuous (not either/or) and for which both susceptibility and exposure matter fundamentally.

Id. ¶ 20. To the extent Dr. Finkel argues the presence of the HLA-DPB1 marker is merely an effect modifier, as opposed to a *sine qua non* of contracting CBD, *Pohl* rejected this proposition: “CBD affects between one and three percent of those exposed to beryllium, because only those individuals with a specific immune response or allergy to beryllium can develop the disease. Thus, even those workers at [plaintiffs’] plant with enormous exposure to beryllium . . . cannot develop the disease if they lack the immunologic response to beryllium.” 936 A.2d at 45. Without scientific data that might support Dr. Finkel’s hypothesis, the District Court properly did not consider this testimony in its analysis. “A court may conclude that there is simply too great an analytical gap between the data and opinion proffered.” *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997).

As *Pohl* recites, only a small subset of an exposed population (those who carry the genetic marker) is at risk of developing CBD; thus, the issue presented here is distinguishable from *Foust*. Unlike exposure to beryllium, the evidence presented on PCBs in *Foust* seems to indicate that all persons are at risk of developing disease from exposure alone—that is, there is no known genetic predisposition that affects risk. *Foust*, 756 A.2d at 119. The linear relationship

between PCB exposure and disease allowed the Pennsylvania Commonwealth Court in *Foust* to generalize risk based on PCB exposure levels alone. Under *Pohl*, the relationship between beryllium exposure and CBD is relatively non-linear, making generalized risk assessments inappropriate.

The essence of Zimmerman's arguments, which are supported by expert testimony, is that risk of contracting CBD develops through beryllium exposure alone, independent of sensitization. Zimmerman contends the concept of sensitization, although important to understanding the pathogenesis of the disease, is not an indicator of risk. *See, e.g.*, Decl. of Dr. Finkel (Zimmerman action) ¶ 20 (“[T]he dubious assertion that ‘only susceptible people can develop CBD’ is irrelevant to human risk assessment, even if it were true.”); Decl. of Dr. Rossman (Zimmerman action) ¶ 7 (“I can categorically state that one does not need to be diagnosed with BeS in order to be considered significantly at risk for contracting CBD.”); Decl. of Dr. Glazer (Zimmerman action) ¶ 17 (“All [members of the proposed class] are at a significantly increased risk for the development of beryllium related health effects.”). But nearly identical testimony was presented in *Pohl* by experts Zimmerman uses in his case. Dr. Martyny “opined with a reasonable degree of scientific certainty that each of the [plaintiffs] . . . was at a significantly increased risk of contracting CBD as a result of exposure to beryllium in Reading” Brief for Appellants at 13–14, *Pohl v. NGK Metals Corp.*, No. 2083 EDA 2006 (Pa. Super. Ct. Sept. 3, 2007), 2007 WL 2721323. Similarly, Dr.

Maier explained that each plaintiff was at a significantly increased risk of developing CBD due to beryllium exposure, and that once a person has been exposed, his risk of developing CBD remains with him for life. *Id.* at 14–15 (citing Maier Affidavit). After considering these expert opinions, the Superior Court in *Pohl* found that plaintiffs had still failed to make a prima facie showing of significantly increased risk under *Redland Soccer*.²⁴

The *Pohl* court did not dismiss plaintiffs' claims based only on a failure of proof; it dismissed after holding that the risk threshold under the fourth element of the *Redland Soccer* test, given the current state of scientific knowledge on the relationship between beryllium exposure and disease, fell on sensitization. For these reasons, Zimmerman has failed to present sufficient evidence that “as a proximate result of the exposure,” he “has a significantly increased risk of contracting” CBD. *Redland Soccer*, 696 A.2d at 145–46.

²⁴Both plaintiffs' references to Brush Wellman's, OSHA's, and other governmental agencies' medical monitoring programs are also unavailing. They are helpful to understand the effects of beryllium exposure, but they do not aid us in defining what constitutes a “significantly increased risk” under Pennsylvania law.

IV.

Sheridan contends the District Court erred in granting Cabot's motion for judgment on the pleadings under Fed. R. Civ. P. 12(c) on the grounds of res judicata, or claim preclusion.²⁵ "[A] final judgment on the merits of an action precludes the parties or their privies from relitigating issues that were or could have been raised in that action." *Churchill v. Star Enters.*, 183 F.3d 184, 194 (3d Cir. 1999) (quoting *Rivet v. Regions Bank of La.*, 522 U.S. 470, 473 (1998)). To succeed in the assertion of the defense, the defendant must show there has been "(1) a final judgment on the merits in a prior suit involving; (2) the same parties or their privies; and (3) a subsequent suit based on the same causes of action." *Id.* (quoting *United States v. Athlone Indus., Inc.*, 746 F.2d 977, 984

²⁵Judgment on the pleadings "will not be granted unless the movant clearly establishes that no material issue of fact remains to be resolved and that he is entitled to judgment as a matter of law." *Rosenau v. Unifund Corp.*, 539 F.3d 218, 221 (3d Cir. 2008) (quoting *Jablonski v. Pan Am. World Airways, Inc.*, 863 F.2d 289, 290–91 (3d Cir. 1988) (internal quotation marks and citations omitted)). We exercise plenary review over a district court's decision granting a motion for judgment on the pleadings, and "view the facts presented in the pleadings and the inferences to be drawn therefrom in the light most favorable to the nonmoving party." *Id.* (quoting *Jablonski*, 863 F.2d at 290–91) (internal quotation marks and citations omitted).

(3d Cir. 1984)). We “[do] not apply this conceptual test mechanically,” but “focus on the central purpose of the doctrine, to require a plaintiff to present all claims arising out [of] the same occurrence in a single suit.” *Id.* (quoting *Athlone*, 746 F.2d at 984). In so doing, we avoid piecemeal litigation and conserve judicial resources. *See id.*

In 2002, Sheridan brought a personal injury action against Cabot for negligence and strict liability, alleging that her exposure to beryllium near the Reading Plant from 1951 to 1956 caused her to contract CBD. She sought compensatory and punitive damages. The District Court granted Cabot’s motion for summary judgment, finding that although Sheridan had been diagnosed with CBD, she had not suffered a compensable injury under Pennsylvania law. *Sheridan v. Cabot Corp. (Sheridan I)*, No. Civ. A. 02-1212, 2003 WL 22999256, at *4–5 (E.D. Pa. Mar. 12, 2003) (citing *Simmons*, 674 A.2d at 237), *aff’d*, 113 F. App’x 444 (3d Cir. 2004). Sheridan then initiated this putative class action as a lead plaintiff against Cabot, among other defendants, for medical monitoring (*Sheridan II*). The underlying facts supporting her allegation of negligence are the same as those in *Sheridan I*—that she was exposed to beryllium particles emitted from the Reading Plant as a result of living in the surrounding community, which can cause CBD and other adverse beryllium health effects.

The *Sheridan II* court granted Cabot’s motion for judgment on the pleadings, finding that Sheridan’s claim against it is barred by the doctrine of claim preclusion. Specifically, the

court held that (1) Cabot had obtained a judgment on the merits against Sheridan in *Sheridan I*; (2) Sheridan and Cabot were parties to both actions; and (3) Sheridan's claim was based on the same cause of action as *Sheridan I*. We agree.

First, the *Sheridan I* court's dismissal of Sheridan's negligence and strict liability claims was "on the merits." Sheridan contends that because the court held she did not suffer a compensable injury, it did not reach the merits of her case. The *Sheridan I* court implied that because Sheridan's personal injury claim had not yet ripened, she could properly initiate a second personal injury action if and when she begins to suffer a "compensable injury." *Sheridan I*, 2003 WL 22999256, at *4–5. It also noted that Sheridan's statute of limitations period had "not begun to run, much less expired." *Id.* at *5 n.2. Sheridan cites the Restatement (Second) of Judgments, which states, in part:

A valid and final personal judgment for the defendant, which rests on the prematurity of the action or on the plaintiff's failure to satisfy a precondition of suit, does not bar another action by the plaintiff instituted after the claim has matured, or the precondition has been satisfied, unless a second action is precluded by operation of the substantive law.

Restatement (Second) of Judgments § 20(2) (1982). Just as cases dismissed for lack of jurisdiction, lack of venue, improper

service, and improper joinder do not bar another action after a claim has matured, so too, Sheridan argues, does her claim in *Sheridan I* not bar a subsequent claim after the initial action has “matured.” But because her claim in *Sheridan II* is simply seeking another form of relief—medical monitoring instead of compensatory damages—based on the same underlying factual averments, her initial claim in *Sheridan I* has not matured. Accordingly, § 20(2) of the Restatement does not apply, and the *Sheridan I* court’s decision was on the merits.²⁶

Second, Cabot has met the “same parties” requirement of the claim preclusion defense because Sheridan and the company

²⁶By stating that Sheridan can bring a second personal injury claim if and when she suffers a “compensable injury,” the *Sheridan I* court seems to have implicitly recognized the “two-disease” rule under Pennsylvania law, which permits a plaintiff to commence separate causes of action for each exposure-based disease she develops. *See Simmons*, 674 A.2d at 237; *see also Abrams v. Pneumo Abex Corp.*, 981 A.2d 198, 206–07 (Pa. 2009) (applying *Simmons*). The Pennsylvania Supreme Court adopted this rule so that plaintiffs would not be forced to “establish all future harm that may result from the contraction of . . . [a] latent disease[] which do[es] not surface until years after the initial exposure. *Simmons*, 674 A.2d at 237. But here Sheridan does not contend she has contracted a new or separate disease. Accordingly, the “two-disease” rule does not apply to her claim.

were parties in both actions. The fact that there are additional parties in *Sheridan II* does not affect our conclusion. See *Gregory v. Chehi*, 843 F.2d 111, 119 (3d Cir. 1988) (“The essence of the cause of action . . . is not altered by the addition of more parties.”).

Third, the medical monitoring claim in *Sheridan II* is based on the same cause of action asserted in *Sheridan I*. We take a “broad view” of what constitutes the same cause of action. *Churchill*, 183 F.3d at 194; *Athlone*, 746 F.2d at 984; see also Restatement (Second) of Judgments § 24(1) (“[A] claim extinguished [by the doctrine of claim preclusion] includes all rights of the plaintiff to remedies against the defendant with respect to all or any part of the transaction . . . out of which the action arose.”). “Rather than resting on the specific legal theory invoked, *res judicata* generally is thought to turn on the *essential similarity* of the underlying events giving rise to the various legal claims” *Athlone*, 746 F.2d at 983–84 (quoting *Davis v. U.S. Steel Supply*, 688 F.2d 166, 171 (3d Cir. 1982) (en banc)) (emphasis in *Athlone* omitted). Multiple factors guide our analysis under the essential similarity test: “(1) whether the acts complained of and the demand for relief are the same . . . ; (2) whether the theory of recovery is the same; (3) whether the witnesses and documents necessary at trial are the same . . . ; and (4) whether the *material* facts alleged are the same.” *Id.* at 984 (internal citations omitted). It is not dispositive that a plaintiff asserts a different theory of recovery or seeks different relief in the two actions. *Id.*

Here, although the *Athlone* factors point in both directions, the factual assertions are indistinguishable. Sheridan correctly notes that the demand for relief is different in each case. In *Sheridan I*, she alleged the beryllium emissions actually caused her to develop CBD and sought compensatory and punitive damages. In contrast, she contends in *Sheridan II* that the beryllium exposure merely increased her risk of contracting CBD and seeks medical monitoring instead of damages. She would have had to produce medical testimony in *Sheridan I* to prove the beryllium exposure was responsible for causing CBD, while in *Sheridan II* she needs to produce testimony showing only that she was at an increased risk of contracting the disease. But this does not change the fact that the underlying assertions giving rise to each claim were the same. The beryllium emissions from the Reading Plant and the allegation that Cabot is responsible for these omissions have not changed between *Sheridan I* and *II*.

Sheridan's attempts to circumvent the identical nature of the events giving rise to the causes of action are unavailing. First, she references the fact that additional parties and claims are involved in *Sheridan II*. But as previously mentioned, other parties asserting new claims in the first or second action do not affect a claim preclusion analysis with respect to the parties involved in both proceedings. Second, Sheridan contends that members of the proposed class who are at risk of developing CBD cannot have their medical monitoring claims barred. This is true as applied to any individual who has not already litigated

the same cause of action. Only Sheridan is barred from bringing a medical monitoring claim. Third, Sheridan seems to argue that because she was already “injured,” it was not possible for her to bring a claim to merely monitor her “already-existing injuries” in *Sheridan I*. Only after the *Sheridan I* court held that she had not suffered a compensable injury did she think she had a medical monitoring claim. But Fed. R. Civ. P. 18(a) permits a party to join “independent or alternative claims.” Sheridan cannot dispute that she could have asserted a medical monitoring claim as an alternative to her negligence and strict liability claims. *Cf. Simmons*, 674 A.2d at 240 (“Although we hold that awarding damages for the increased risk and fear of cancer is contrary to the established jurisprudence of this Commonwealth, we find that recovery for medical monitoring is appropriate and just.”).

Barring Sheridan’s medical monitoring claim against Cabot is consistent with the purpose of claim preclusion, namely finality and avoidance of piecemeal litigation. Because the underlying assertions in each action are the same, and because Sheridan could have brought a medical monitoring claim in *Sheridan I*, the District Court properly granted Cabot’s motion for judgment on the pleadings.

V.

We now turn to whether the District Court correctly granted Spotts, Stevens & McCoy’s motion to dismiss based on Zimmerman’s and Sheridan’s failure to plead facts that give rise

to a medical monitoring claim.²⁷ Under *Redland Soccer*, a plaintiff must prove negligence, among other elements, in order to prevail on a common law medical monitoring claim.²⁸ 696 A.2d at 145. Plaintiffs argue that Spotts, Stevens & McCoy's alleged negligence in analyzing and monitoring beryllium levels at the Reading Plant rendered it liable under § 324A of the Restatement (Second) of Torts. This provision, which governs

²⁷We exercise plenary review over district court orders dismissing claims under Fed. R. Civ. P. 12(b)(6). “Reviewing such an order, we accept as true all allegations in the plaintiff’s complaint as well as all reasonable inferences that can be drawn from them, and we construe them in a light most favorable to the non-movant.” *Monroe v. Beard*, 536 F.3d 198, 205 (3d Cir. 2008). To survive a motion to dismiss, “a complaint must contain sufficient factual matter, accepted as true, to ‘state a claim to relief that is plausible on its face.’” *Ashcroft v. Iqbal*, -- U.S. ----, 129 S. Ct. 1937, 1949 (2009) (quoting *Bell Atlantic v. Twombly*, 550 U.S. 544, 570 (2007)). “A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Id.* (quoting *Twombly*, 550 U.S. at 556).

²⁸Even if plaintiffs were able to establish a prima facie case for negligence, they would still need to prove the other elements in *Redland Soccer*, particularly the “significantly increased risk” element, discussed *supra*.

liability to a third party for negligent performance of an undertaking, states:

One who undertakes, gratuitously or for consideration, to render services to another which he should recognize as necessary for the protection of a third person or his things, is subject to liability to the third person for physical harm resulting from his failure to exercise reasonable care to protect his undertaking, if

- (a) his failure to exercise reasonable care increases the risk of such harm, or
- (b) he has undertaken to perform a duty owed by the other to the third person, or
- (c) the harm is suffered because of reliance of the other or the third person upon the undertaking.

Restatement (Second) of Torts § 324A (1965). Pennsylvania has adopted § 324A. *See Cantwell v. Allegheny County*, 483 A.2d 1350, 1353 (Pa. 1984).

For liability to be imposed under § 324A, “the defendant specifically [must have] undertaken to perform the task that [it] is charged with having performed negligently.” *Patentas v. United States*, 687 F.2d 707, 716 (3d Cir. 1982). In other words, the defendant must have assumed an affirmative duty to be liable to third parties for negligently performing that duty. *See Evans v. Liberty Mut. Ins. Co.*, 398 F.2d 665, 667 (3d Cir. 1968)

(“It is well-settled under Pennsylvania law . . . that plaintiff must prove, inter alia, the existence of a duty owed to him and a breach thereof”) (internal quotation marks and citation omitted). The scope of this rule, known as the “good samaritan doctrine,” is measured by the scope of the defendant’s undertaking. *Patentas*, 687 F.2d at 716. Even if a particular injury is foreseeable, *see Cantwell*, 483 A.2d at 1353–54 (stating that § 324A “is essentially a requirement of foreseeability”), a defendant must still have a specific duty to prevent the injury, *see Breiner v. C&P Home Builders, Inc.*, 536 F.2d 27, 31 (3d Cir. 1976) (“Foreseeability of injury, however, in the absence of a duty to prevent that injury, is an insufficient basis on which to rest liability.” (citing *Evans*, 398 F.2d at 667)). In addition to proving the defendant owed a duty to exercise reasonable care, the plaintiff must also show that one of the three causation requirements in § 324A has been met. *See Patentas*, 687 F.2d at 716 (“Section 324A specifies three circumstances in which the injury may be proximately caused by the negligent performance of an undertaking.”).

Boiled down to its core, plaintiffs’ Amended Complaint contends that Spotts, Stevens & McCoy breached its duty of reasonable care by failing to warn members of the community surrounding the Reading Plant of the beryllium emissions from the facility. Am. Compl. ¶¶ 63–64. But the Amended Complaint also states that “Spotts, Stevens & McCoy was paid by the Reading Plant operators, defendants herein, to test, sample, analyze, and monitor . . . the levels of beryllium

[and] Spotts, Stevens & McCoy was responsible for advising defendants herein” *Id.* ¶ 58. Accordingly, for Spotts, Stevens & McCoy to be liable under § 324A, plaintiffs must prove this *specific* duty was performed negligently. If plaintiffs had asserted that Spotts, Stevens & McCoy negligently performed the tasks it *actually* undertook—that is, testing, analyzing, and monitoring the levels of beryllium, and reporting those tests *to the owner and operator* of the facility—then the assertions would sufficiently establish a claim under § 324A. But plaintiffs’ Amended Complaint makes no such allegations. In order for Spotts, Stevens & McCoy to have negligently failed to warn plaintiffs of harmful beryllium exposures, it must have undertaken the responsibility of making that warning.

Plaintiffs’ reference to *Farabaugh v. Pennsylvania Turnpike Commission*, 911 A.2d 1264, 1277 (Pa. 2006), where the Pennsylvania Supreme Court noted that there is a “social duty” on parties “to perform their contractual obligations so as not to injure third parties,” is inapposite. In *Farabaugh*, the plaintiff alleged the defendant had failed to exercise reasonable care in performing the services owed under its contract. *Id.* Here, however, plaintiffs do not allege Spotts, Stevens & McCoy negligently performed its *contractual* duties.

The flaw in the Amended Complaint is its failure to match an allegation of a specific duty owed to plaintiffs with an allegation of negligent performance of that duty. By failing to make this connection, plaintiffs cannot succeed in establishing

liability under § 324A.²⁹ Accordingly, the District Court properly granted Spotts, Stevens & McCoy's motion to dismiss for failure to state a claim upon which relief can be granted.

VI.

For the foregoing reasons, we will affirm the District Court's judgments on appeal in both the Anthony and Zimmerman actions.

²⁹Because plaintiffs have not identified a duty that Spotts, Stevens & McCoy owed them, we need not determine the subsequent question of whether they have proven proximate cause under § 324A.